

# FORM AE-100

DEPARTMENT OF TRANSPORT STATEMENT OF COMPLIANCE OF AIRCRAFT OR AIRCRAFT COMPONENTS WITH THE AIRWORTHINESS REQUIREMENTS		AE-100 No.: AE800-2 Initial Issue Date: 25 March, 2009 Revision: 0 Revision Date: Approval No.: SH00-48 Delegation No.: 290M Delegate Name: E. Burgoin Company: AERO Design Ltd.	
Aircraft Mfr: Bell Aircraft Model: 206L Series / 407 Registration: ALL ELIGIBLE	Model / Type Airplane <input type="checkbox"/> Helicopter <input checked="" type="checkbox"/> Appliance <input type="checkbox"/> Component <input type="checkbox"/>		
LIST OF APPROVED REPORTS AND DATA			
Document Number	Revision	Document Title	Compliance Status
DCL800-2	0	Document Control List and all documents referred to therein	As per Compliance Program, CP800-2, Revision 0
DCL800-12	0	Document Control List and all documents referred to therein	
ER800.02	0	Engineering Report	
80002	0	Quick Release Step Installation	
80010	1	Step Assembly	
80020	0	Step End Fabrication	
DATA APPROVED BY TRANSPORT CANADA			
ICA800.90	2	Instructions for Continued Airworthiness	
FMS701.90	2	Flight Manual Supplement	
FMS702.90	2	Flight Manual Supplement	
CERTIFICATION UNDER THE AUTHORITY VESTED IN ME BY THE DEPARTMENT OF TRANSPORT, I HEREBY CERTIFY THAT THE DATA LISTED ABOVE AND ON THE ATTACHED SHEETS NUMBERED Nil HAVE BEEN EXAMINED IN ACCORDANCE WITH ESTABLISHED PROCEDURES AND FOUND TO COMPLY, TO THE BEST OF MY KNOWLEDGE AND BELIEF WITH THE PERTINENT COMPLIANCE REQUIREMENTS.			
I THEREFORE <input type="checkbox"/> RECOMMEND FOR APPROVAL OF THESE DATA <input checked="" type="checkbox"/> APPROVE THESE DATA			
 E. Burgoin, DAR 290M			

Transport  
CanadaTransports  
Canada

1100-9700 Jasper Avenue  
Edmonton, Alberta  
T5J 4E6

**800-2**

Your file      Votre référence

Our file      Notre référence

**C-08-1002****5010-0402**

March 24, 2009

AERO Design Limited  
2013 39 Ave. NE  
Calgary, AB  
T2E 6R7

**ATTENTION: Ted Burgoin – DAR 290M**

Dear Sirs:

**SUBJECT:    Extension of DAR 290M Authority – Bell 206L/407, Quick Release Step  
                 Installation, NAPA File C-08-1002, SH00-48 – Issue 7**

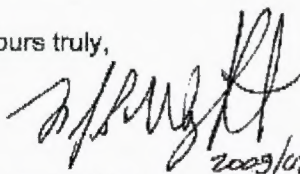
This is in response to your 3 December 2008 request for extension of delegation to cover the subject design change. You are hereby authorized to make findings of compliance for the following Compliance Paragraphs as listed in Compliance Plan CP800-2:

27.251 Vibration  
27.629 Flutter

This is a one-time extension and is limited to be exercised for this NAPA file only.

If you have any questions or wish to discuss this project further, please contact the project OPI, Jack Staal, at the Edmonton TCC office.

Yours truly,

  
2009/03/26

F.J.B. Wright  
Regional Manager Aircraft Certification  
Prairie and Northern Region  
Phone: (780) 495-3856  
Fax: (780) 495-7963

**Canada**

Transport  
CanadaTransports  
Canada

1100, 9700 Jasper Avenue  
Edmonton, Alberta  
T5J 4E6

Your file: 800-2  
Votre référence:

Our file: Notre référence:

C-08-1002  
5010-0402

March 26, 2009

AERO Design Ltd  
2013 39 Ave. NE  
Calgary, AB  
T2E 6R7

Dear Sirs:

Attached is a corrected delegation letter reflecting the proper subject to be a Bell 206L/407, Quick Release Step Installation. This letter supersedes the previously faxed letter of the same date which incorrectly referred to the subject as a Bell 206B, Quick Release Cargo Basket Installation. Other aspects of the letter remain unchanged.

Sincerely,

J. Staal  
Aircraft Certification Technologist  
Prairie and Northern Region  
Ph 780-495-5227  
Fax 780-495-7963 (fax)

Canada



Transport  
Canada

Transports  
Canada

1100-9700 Jasper Avenue  
Edmonton, Alberta  
T5J 4E6

March 24, 2009

AERO Design Limited  
2013 39 Ave. NE  
Calgary, AB  
T2E 6R7

**ATTENTION: Ted Burgoin – DAR 290M**

Dear Sirs:

**SUBJECT: Extension of DAR 290M Authority – Bell 206B, Quick Release Cargo Basket Installation, NAPA File C-08-1002, SH00-48 – Issue 7**

This is in response to your 3 December 2008 request for extension of delegation to cover the subject design change. You are hereby authorized to make findings of compliance for the following Compliance Paragraphs as listed in Compliance Plan CP800-2:

27.251 Vibration  
27.629 Flutter

This is a one-time extension and is limited to be exercised for this NAPA file only.

If you have any questions or wish to discuss this project further, please contact the project OPI, Jack Staal, at the Edmonton TCC office.

Yours truly,

F.J.B. Wright  
Regional Manager Aircraft Certification  
Prairie and Northern Region  
Phone: (780) 495-3856  
Fax: (780) 495-7963

**800-2**

Your file      Votre référence

Our file      Notre référence

**C-08-1002**

**5010-0402**

206L STEP

Canada



135 STEP

Ground / top of step

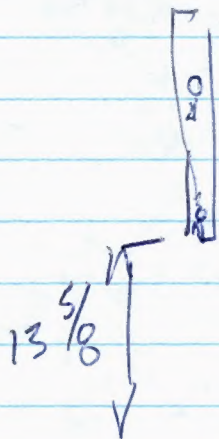
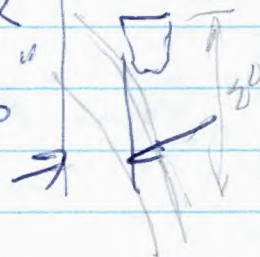
Fwd x tube  
Aft

20"

20"

CABIN FLOOR

APPROX  
6"

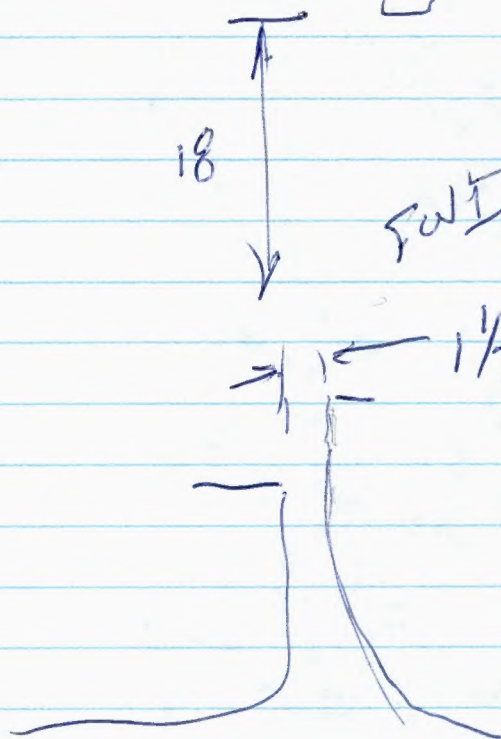


NET  
RIGHT

18

FWD

1 1/2" AT CABIN FLOOR



**Jeff Clarke**

---

**From:** Jeff Clarke [jeff@aerodesign.ca]  
**Sent:** December 5, 2008 2:43 PM  
**To:** 'Staal, Jack'  
**Subject:** RE: C-08-1002 - Bell 206L/407 Quick Release Step (4)

Attached are the revised mounting beam drawings, and a draft of the STC.

Description of the changes:

The existing mounting beams for the Bell 206L/407 Quick Release Cargo Basket are modified with an extra keyway near the bottom to mount the step. The existing locking mechanism for the basket is also used for the step. A set of keyways are put on the inboard side of the beam to store the step when the cargo basket is in use, with the same locking mechanism as for the basket.

Please advise when have reviewed the package, and provide extension of delegation, and I will get Ted to sign off on the AE-100 forms. Let me know if you have any questions.

Regards,

Jeff

05/12/2008

**Jeff Clarke**

---

**From:** Jeff Clarke [jeff@aerodesign.ca]  
**Sent:** December 5, 2008 2:35 PM  
**To:** 'Staal, Jack'  
**Subject:** RE: C-08-1002 - Bell 206L/407 Quick Release Step (3)

Attached are the Bell 206L Installation drawings, and changes to the FMS to include the step installation instructions.

Jeff

05/12/2008

**Jeff Clarke**

---

**From:** Jeff Clarke [jeff@aerodesign.ca]  
**Sent:** December 5, 2008 2:33 PM  
**To:** 'Staal, Jack'  
**Subject:** RE: C-08-1002 - Bell 206L/407 Quick Release Step (2)

Attached are the Bell 407 Installation drawings, and changes to the FMS to include the step installation instructions.

Jeff

05/12/2008



**Jeff Clarke**

---

**From:** Jeff Clarke [jeff@aerodesign.ca]  
**Sent:** December 5, 2008 2:31 PM  
**To:** 'Staal, Jack'  
**Subject:** RE: C-08-1002 - Bell 206L/407 Quick Release Step (1)

Jack,

Please find attached documents related to the Bell 206L/407 Quick Release Step. I will send this in a number of emails because some of the files are a little large.

Attached are the drawings, reports, and ICA for the Step itself.

Jeff

---

**From:** Staal, Jack [mailto:jack.staal@tc.gc.ca]  
**Sent:** December 5, 2008 9:50 AM  
**To:** Jeff Clarke  
**Cc:** Oucharek, Greg; Dubyk, Debbie  
**Subject:** RE: C-08-1002 - Bell 206L/407 Quick Release Step

Jeff,

Sorry been out a few days. Email would suffice, I could get Deb to load drwgs into NAPA.

As for the 600N I do not have anything on that. Suggest you check with Greg if you sent it to Greg.

Regards,  
jack

*J.H. (Jack) Staal*

Aircraft Certification Technologist | Technologue, Certification des aeronefs.  
Prairie and Northern Region | Region des Prairies et du Nord

Telephone | telephone: (780)495-5227  
Facsimilie | telecopier: (780)495-7963  
Email | courriel: jack.staal@tc.gc.ca  
TTY / ATS : 1-888-675-6863

Transport Canada | Transports Canada  
1100- 9700, Jasper Avenue | avenue Jasper (RAED)  
Edmonton, AB T5J 4E6  
Government of Canada | Gouvernement du Canada  
To provide feedback to TCCA, use CAIRS. See:  
<<http://www.tc.gc.ca/CivilAviation/ManagementServices/QA/cairs.htm>>

Pour tout commentaire a TCAC, utiliser CAIRS. Voir  
<<http://www.tc.gc.ca/AviationCivile/ServicesdeGestion/AQ/ssqac.htm>>

05/12/2008

-----Original Message-----

**From:** Jeff Clarke [mailto:jeff@aerodesign.ca]

**Sent:** Thursday, December 04, 2008 9:45 AM

**To:** Staal, Jack

**Subject:** C-08-1002 - Bell 206L/407 Quick Release Step

Jack,

I am having problems uploading documents into NDWL. Dennis has contacted someone for me to try and get the problem resolved.

Would you prefer to have paper copies of the drawings/reports, or can I email them?

Also, will you be dealing with the MD600N basket that I submitted last week to Greg?

Regards,

Jeff Clarke, CET

AERO Design Ltd.  
2013 39th Avenue NE  
Calgary, Alberta, Canada  
T2E 6R7

Phone: 403.250.8027

Fax: 403.250.8333

# DOCUMENT CONTROL LIST

DOCUMENT NO.	DOCUMENT CONTENT	REVISION
<b>INSTALLATION DOCUMENTS</b>		
80002	Quick Release Step Installation	0
ICA800.90	Instructions for Continued Airworthiness	2
FMS701.90	Flight Manual Supplement (Bell 407)	2
FMS702.90	Flight Manual Supplement (Bell 206L Series)	2
<b>FABRICATION DOCUMENTS</b>		
DCL800-12	Document Control List for Quick Release Step	0
<b>ENGINEERING DOCUMENTS</b>		
APPROVAL:	ORIGINAL DATE: 2 December, 2008 REVISION DATE:	<b>AERO DESIGN LTD.</b> 2013 – 39 <sup>th</sup> Ave NE, Calgary, Alberta, T2E 6R7 Ph. (403) 250-8027 Fax. (403) 250-8333 www.aerodesign.ca
	SHEET 1 OF 1	<b>Bell 206L Series &amp; 407 Quick Release Step Installation</b>
	<b>DCL800-2</b>	Rev. <b>0</b>

# DOCUMENT CONTROL LIST

DOCUMENT NO.	DOCUMENT CONTENT	REVISION
<b>FABRICATION DOCUMENTS</b>  80010 80020	Step Assembly Step End Fabrication	1 0
<b>ENGINEERING DOCUMENTS</b>  ER800.02	Engineering Report	0
APPROVAL:	ORIGINAL DATE: 2 December, 2008  REVISION DATE:	<b>AERO DESIGN LTD.</b> 2013 – 39 <sup>th</sup> Ave NE, Calgary, Alberta, T2E 6R7 Ph. (403) 250-8027 Fax. (403) 250-8333 www.aerodesign.ca
	SHEET 1 OF 1	<b>Bell 206L Series &amp; 407 Quick Release Step Fabrication</b>
	<b>DCL800-12</b>	Rev.  <b>0</b>



# DOCUMENT CONTROL LIST

DOCUMENT NO.	DOCUMENT CONTENT	REVISION
<b>FABRICATION DOCUMENTS</b>		
69830	Forward Beam Fabrication	3
69831	Aft Beam Fabrication	3
<b>ENGINEERING DOCUMENTS</b>		
ER698.02	Engineering Report	0
TP698.03	Test Plan	0
ER698.04	Engineering Report	0
APPROVAL:	ORIGINAL DATE: 3 May, 2006  REVISION DATE: 2 December, 2008	<b>AERO DESIGN LTD.</b> 2013 – 39 <sup>th</sup> Ave NE, Calgary, Alberta, T2E 6R7 Ph. (403) 250-8027 Fax. (403) 250-8333
	SHEET 1 OF 1	<b>Quick Release Mounting Beams</b>
	<b>DCL698-2</b>	Rev.  <b>3</b>

# DOCUMENT CONTROL LIST

DOCUMENT NO.	DOCUMENT CONTENT	REVISION
<b>INSTALLATION DOCUMENTS</b>		
70201	Quick Release Cargo Basket Installation	3
70202	Quick Release Mounting Provisions Installation	0
ICA698.90	Instructions for Continued Airworthiness	1
FMS702.90	Flight Manual Supplement	2
<b>FABRICATION DOCUMENTS</b>		
DCL698-1	Document Control List for Quick Release Cargo Basket	1
DCL698-2	Document Control List for Beams	3
<b>ENGINEERING DOCUMENTS</b>		
APPROVAL:	ORIGINAL DATE: 10 May, 2006  REVISION DATE: 2 December, 2008	<b>AERO DESIGN LTD.</b> 2013 – 39 <sup>th</sup> Ave NE, Calgary, Alberta, T2E 6R7 Ph. (403) 250-8027 Fax. (403) 250-8333
	SHEET 1 OF 1	<b>Bell 206L Series Quick Release Cargo Basket Installation</b>
	<b>DCL702</b>	Rev. <b>2</b>

# DOCUMENT CONTROL LIST

DOCUMENT NO.	DOCUMENT CONTENT	REVISION
<b>INSTALLATION DOCUMENTS</b>		
70101	Quick Release Cargo Basket Installation	3
70102	Quick Release Mounting Provisions Installation	0
ICA698.90	Instructions for Continued Airworthiness	1
FMS701.90	Flight Manual Supplement	2
SI698.91	Service Instructions – Sliding Door Modification	0
<b>FABRICATION DOCUMENTS</b>		
DCL698-1	Document Control List for Quick Release Cargo Basket	1
DCL698-2	Document Control List for Beams	3
<b>ENGINEERING DOCUMENTS</b>		
APPROVAL:	ORIGINAL DATE: 10 May, 2006	<b>AERO DESIGN LTD.</b> 2013 – 39 <sup>th</sup> Ave NE, Calgary, Alberta, T2E 6R7 Ph. (403) 250-8027 Fax. (403) 250-8333
	REVISION DATE: 2 December, 2008	
	SHEET 1 OF 1	<b>Bell 407</b> <b>Quick Release Cargo Basket</b> <b>Installation</b>
<b>DCL701</b>		Rev. <b>3</b>



Department of Transport

## Supplemental Type Certificate

**This approval issued to:**

AERO Design Ltd.  
2013 - 39th Avenue NE  
Calgary, Alberta  
T2E 6R7

**Approval Number:** SH00-48

**Issue Number.:** 7

**Date of Approval:** 8 December, 2000

**Date of Issue:**

**Responsible Office:** Prairie and Northern

**Aircraft / Engine Type:** Bell

**Model:** 206L, L-1, L-3, L-4  
407

**Registration:** All Eligible

**Serial No.:** All Eligible

**Canadian Type Certificate or Equivalent:** H-92

**Description of Design Change:** Installation of External Attachment Provisions  
Installation of Cargo Basket  
Installation of Auxiliary Step  
Installation of Quick Release Step

**Required Equipment and Limitations:**

**Bell 407 Only:**

**Configuration A – External Attachment Provisions Only:**

Installation of the External Attachment Provisions is to be completed in accordance with Transport Canada approved, AERO Design Ltd., Document Control List DCL700, Rev. 1, dated 28 September 2007, or later approved revision.

AERO Design Ltd., Instructions for Continued Airworthiness ICA700.90, Revision 0, dated 3 May 2006, or later accepted revision, is required with this installation.

Transport Canada approved, AERO Design Ltd., Flight Manual Supplement FMS700.91, Revision 0, dated 4 May 2006, or later approved revision, is required with this installation.

External Attachment Provisions installed in accordance with DCL700 may remain installed if the basket installation is removed.

(see continuation sheet...)

Conditions: This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated will not adversely affect the airworthiness of the modified product.

**For the Minister of Transport**



## Continuation Sheet

Approval Number: SH00-48

Issue Number: 7

Date of Approval: 8 December, 2000

Date of Issue:

### Approval Data (Continued):

NOTE: THIS ADDENDUM SHALL REMAIN PART OF THE CERTIFICATE REFERRED TO THEREIN.

### Bell 407 Only (Continued):

#### Configuration B – External Cargo Basket Installation (Low Mounted Fixed):

Installation of Configuration A, External Attachment Provisions, is a prerequisite for installation of Configuration B, External Cargo Basket Installation. Installation of the External Cargo Basket is to be completed in accordance with Transport Canada Approved, AERO Design Ltd., Document Control List DCL606, Revision 3, dated 28 September 2007, or later approved revision. High skid gear is required for the basket installation. Placard is required on the basket lid.

Transport Canada approved, AERO Design Ltd., Flight Manual Supplement FMS 606.01, Revision 2, dated 28 September 2007, or later approved revision, is required with this installation.

AERO Design Ltd., Instructions for Continued Airworthiness ICA492.90, Revision 1, dated 28 September 2007, or later accepted revision, is required with this installation.

Basis of Certification is as defined by the applicable Type Certificate Data Sheets.

#### Configuration C – External Cargo Basket Installation (High Mounted Fixed):

Installation of Configuration A, External Attachment Provisions, is a prerequisite for installation of Configuration C, External Cargo Basket Installation. Installation of the External Cargo Basket is to be completed in accordance with Transport Canada Approved, AERO Design Ltd., Document Control List DCL606-1, Revision 0, dated 1 February 2005, or later approved revision. Approved emergency exit "push-out" windows or an approved sliding door are required on the side of the helicopter that the basket is installed on if passengers are to be carried. Placard is required on the basket lid.

Transport Canada approved, AERO Design Ltd., Flight Manual Supplement FMS 606.01, Revision 1, dated 01 February 2005, or later approved revision, is required with this installation.

AERO Design Ltd., Maintenance Instructions MI 606.01, Revision 2, dated 19 July 2004, or later accepted revision, is required with this installation.

Basis of Certification is as defined by the applicable Type Certificate Data Sheets.

#### Configuration D – External Cargo Basket Installation (Low Mounted Quick Release):

Installation of Configuration A, External Attachment Provisions, is a prerequisite for installation of Configuration D, External Cargo Basket Installation. Installation of the External Cargo Basket is to be completed in accordance with Transport Canada Approved, AERO Design Ltd., Document Control List DCL701, Revision 3, dated 2 December 2008, or later approved revision. High skid gear is required for the basket installation. Placard is required on the basket lid.

Transport Canada approved, AERO Design Ltd., Flight Manual Supplement FMS 701.90, Revision 2, dated 17 July 2008, or later approved revision, is required with this installation.

AERO Design Ltd., Instructions for Continued Airworthiness ICA698.90, Revision 1, dated 9 November 2006, or later accepted revision, is required with this installation.

Basis of Certification is as defined by the applicable Type Certificate Data Sheets.

## Continuation Sheet

Approval Number: SH00-48

Issue Number: 7

Date of Approval: 8 December, 2000

Date of Issue:

### Approval Data (Continued):

**NOTE: THIS ADDENDUM SHALL REMAIN PART OF THE CERTIFICATE REFERRED TO THEREIN.**

### Bell 407 Only (Continued):

#### **Configuration E – External Cargo Basket Installation (High Mounted Quick Release):**

Installation of Configuration A, External Attachment Provisions, is a prerequisite for installation of Configuration E, External Cargo Basket Installation. Installation of the External Cargo Basket is to be completed in accordance with Transport Canada Approved, AERO Design Ltd., Document Control List DCL766-1, Revision 0, dated 26 September 2007, or later approved revision. Approved emergency exit "push-out" windows or an approved sliding door are required on the side of the helicopter that the basket is installed on if passengers are to be carried. Placard is required on the basket lid.

Transport Canada approved, AERO Design Ltd., Flight Manual Supplement FMS 766.91, Revision 0, dated 30 October 2007, or later approved revision, is required with this installation.

AERO Design Ltd., Instructions for Continued Airworthiness ICA 766.90, Revision 0, dated 26 September 2007, or later accepted revision, is required with this installation.

Basis of Certification is as defined by the applicable Type Certificate Data Sheets.

### Bell 206L, L-1, L-3, L-4 Only:

#### **Configuration A – External Attachment Provisions Only:**

Installation of the External Attachment Provisions is to be completed in accordance with Transport Canada approved, AERO Design Ltd., Document Control List DCL493, Rev. 6, dated 10 May 2006, or later approved revision.

Transport Canada approved, AERO Design Ltd., Flight Manual Supplement FMS 493.01, Revision 0, dated 19 May 2002, or later approved revision, is required with this installation.

AERO Design Ltd., Instructions for Continued Airworthiness ICA493.90, Revision 0, dated 4 May 2006, or later accepted revision, is required with this installation.

External Attachment Provisions installed in accordance with DCL493 may remain installed if the basket installation is removed.

#### **Configuration B – External Cargo Basket Installation (Low Mounted Fixed):**

Installation of Configuration A, External Attachment Provisions, is a prerequisite for installation of Configuration B, External Cargo Basket Installation. Installation of the cargo basket is to be completed in accordance with Transport Canada Approved, AERO Design Ltd., Document Control List DCL492, Revision 6, dated 28 September 2007, or later approved revision. High skid gear is required for the basket installation. Placard is required on the basket lid.

Transport Canada approved, AERO Design Ltd., Flight Manual Supplement FMS 492.01, Revision 2, dated 28 September 2007, or later approved revision, is required with this installation.

AERO Design Ltd., Instructions for Continued Airworthiness ICA492.90, Revision 1, dated 28 September 2007, or later accepted revision, is required with this installation.

Basis of Certification is as defined by the applicable Type Certificate Data Sheets, plus FAR 27 at amendment 27-24.

## Continuation Sheet

Approval Number: SH00-48

Issue Number: 7

Date of Approval: 8 December, 2000

Date of Issue:

### Approval Data (Continued):

NOTE: THIS ADDENDUM SHALL REMAIN PART OF THE CERTIFICATE REFERRED TO THEREIN.

### Bell 206L, L-1, L-3, L-4 Only (continued):

#### Configuration C – External Cargo Basket Installation (Low Mounted Quick Release):

Installation of Configuration A, External Attachment Provisions, is a prerequisite for installation of Configuration C, External Cargo Basket Installation. Installation of the External Cargo Basket is to be completed in accordance with Transport Canada Approved, AERO Design Ltd., Document Control List DCL702, Revision 2, dated 2 December 2008, or later approved revision. High skid gear is required for the basket installation. Placard is required on the basket lid.

Transport Canada approved, AERO Design Ltd., Flight Manual Supplement FMS 702.90, Revision 2, dated 17 July 2008, or later approved revision, is required with this installation.

AERO Design Ltd., Instructions for Continued Airworthiness ICA698.90, Revision 1, dated 9 November 2006, or later accepted revision, is required with this installation.

Basis of Certification is as defined by the applicable Type Certificate Data Sheets.

#### Configuration D – External Cargo Basket Installation (High Mounted Quick Release):

Installation of Configuration A, External Attachment Provisions, is a prerequisite for installation of Configuration E, External Cargo Basket Installation. Installation of the External Cargo Basket is to be completed in accordance with Transport Canada Approved, AERO Design Ltd., Document Control List DCL766-1, Revision 0, dated 26 September 2007, or later approved revision. Approved emergency exit "push-out" windows or an approved sliding door are required on the side of the helicopter that the basket is installed on if passengers are to be carried. Placard is required on the basket lid.

Transport Canada approved, AERO Design Ltd., Flight Manual Supplement FMS 766.92, Revision 0, dated 30 October 2007 is required with this installation.

AERO Design Ltd., Instructions for Continued Airworthiness ICA 766.90, Revision 0, dated 26 September 2007 is required with this installation.

Basis of Certification is as defined by the applicable Type Certificate Data Sheets.

### All Models (Bell 206L Series and 407):

#### Auxiliary Step Installation:

Installation of the Auxiliary Step is to be completed in accordance with Transport Canada approved, AERO Design Ltd., Document Control List DCL623, Rev. 0, dated 13 January 2005, or later approved revision.

The Auxiliary Step is optional and is not required with cargo basket installations listed above.

Auxiliary Step installed in accordance with DCL623 may remain installed if the basket installation is removed.

Basis of Certification is as defined by the applicable Type Certificate Data Sheets.

#### Cargo Basket Modifications:

Modifications to the above listed cargo basket configurations to be completed in accordance with Transport Canada approved, AERO Design Ltd., Document Control List DCL704, Rev. 0, dated 10 May 2006, or later approved revision. Eligibility limitations are noted on the drawings.

## Continuation Sheet

Approval Number: SH00-48

Issue Number: 7

Date of Approval: 8 December, 2000

Date of Issue:

### Approval Data (Continued):

NOTE: THIS ADDENDUM SHALL REMAIN PART OF THE CERTIFICATE REFERRED TO THEREIN.

### All Models (Bell 206L Series and 407) (continued):

#### Quick Release Step Installation:

Installation of the Low Mounted Quick Release Cargo Basket (407 – Configuration D; 206L – Configuration C) is required prior to installation of the Quick Release Step. Installation of the Quick Release Step is to be completed in accordance with Transport Canada approved, AERO Design Ltd., Document Control List DCL800-2, Rev. 0, dated 2 December 2008, or later approved revision.

The Quick Release Step is optional and is not required with the Quick Release Cargo Basket Installation. The Quick Release Step may be stowed in the inboard position on the mounting provisions when the Quick Release Cargo Basket is installed.

AERO Design Ltd., Instructions for Continued Airworthiness ICA 800.90, Revision 2, dated 2 December 2008, or later accept revision, is required with this installation.

Basis of Certification is as defined by the applicable Type Certificate Data Sheets.



## BELL 407

### **ROTORCRAFT FLIGHT MANUAL SUPPLEMENT** for the **INSTALLATION of the AERO DESIGN** **QUICK RELEASE CARGO BASKET** **AND/OR QUICK RELEASE STEP**

Supplemental Type Certificate No. SH00-48

Sections I, II, III and IV of this document comprise the Transport Canada Approved sections of this Flight Manual Supplement. Compliance with Section I, Limitations, is mandatory.

Section V and any subsequent sections if present are Unapproved and are provided for information only.

The information and data contained in this Flight Manual Supplement supersede or supplement that contained in the basic Approved Flight Manual for the Bell 407 when fitted with the Quick Release Cargo Basket or Quick Release Step Installation. For limitations, procedures and performance not listed in this Flight Manual Supplement, refer to the Approved Flight Manual and other approved Flight Manual Supplements.

## Table of Contents

I	Limitations	3
II	Normal Procedures	3
III	Emergency Procedures	3
IV	Performance	4
V	Weight and Balance	5
VI	Installation / removal instructions	7

## Record of Revisions

Revision	Issue Date	Pages Revised	Date Inserted	By
0	05 May, 2006	None		
1	09 Nov, 2006	2, 6		
2	17 July, 2008	All		

## I LIMITATIONS

1. The maximum load in the AERO Design Ltd. Quick Release Cargo Basket is 200 lb. (90.5 kg).
2. Flight operations limited to VFR conditions with AERO Design Ltd. Cargo Basket installed.
3. Maximum lateral or rearward speed limited to 25 KIAS.
4. Maximum winds from aft quadrants limited to 25 KIAS for takeoff, landing or hover flight.
5.  $V_{NE}$  is 140 KIAS except when the  $V_{NE}$  of the basic rotorcraft is more restrictive, in which case the lower  $V_{NE}$  applies.
6. Quick Release Step may be installed when the basket is removed.

## II NORMAL PROCEDURES

1. Pre-flight inspections:
  - a) Ensure that all cargo stored in the cargo basket does is properly tied down and secured for flight.
  - b) Ensure that the lid of cargo basket is closed and secured.
  - c) Ensure the basket is locked in position on the beams. Pull up on the forward and aft end of the basket to check.
  - d) Ensure the step is locked in position on the beams. Pull up on the forward and aft end of the step to check.

### CAUTION

It is possible to exceed the lateral centre of gravity limits of the rotorcraft under some loading conditions. Pilots must ensure that lateral C of G is within limits when loading the basket.

## III EMERGENCY PROCEDURES

No change from basic Approved Flight Manual.

### CAUTION:

The rotorcraft glide angle is steeper than that of the basic helicopter when the AERO Design Ltd. Cargo Basket is installed.

#### **IV PERFORMANCE**

Climb performance may be reduced by up to 200 fpm.

Cruise speeds are reduced by approximately 10 kts. (11 mph).



## V WEIGHT AND BALANCE

1. The following weight and balance is for the low mounted quick release cargo basket configuration, installed in accordance with drawing 70101.

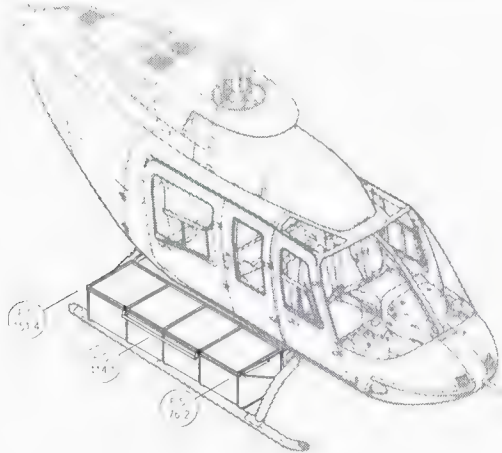


Figure 1 – Low Mounted Quick Release Cargo Basket Configuration

Low Mounted Quick Release Cargo Basket Configuration

Item	Weight	Longitudinal		Lateral	
		Arm	Moment	Arm	Moment
Basket Only <sup>1</sup>	45.0 lb	114.1 in	5134 in*lb	38.5 in	1733 in*lb
	20.4 kg	2898 mm	59 122 mm*kg	978 mm	19 949 mm*kg
Cargo <sup>2</sup> (MAX)	200 lb	114.1 in	22 820 in*lb	38.5 in	7700 in*lb
	90.9 kg	2898 mm	263 467 mm*kg	978 mm	88 900 mm*kg

<sup>1</sup> Weight and balance is for Cargo Basket only. Mounting beams and attachment provisions are not included since they should have been included in the basic rotorcraft weight and balance at time of initial installation.

<sup>2</sup> Longitudinal and Lateral moment arms are given only for the center of the Cargo Basket. Due to the length of the basket, some loading arrangements may require that actual moment arms be measured, to determine the correct moments about the center of gravity.

### CAUTION:

It is possible to exceed lateral CG limits in some configurations.

2. The following weight and balance is for the quick release step configuration, installed in accordance with drawing 80002.

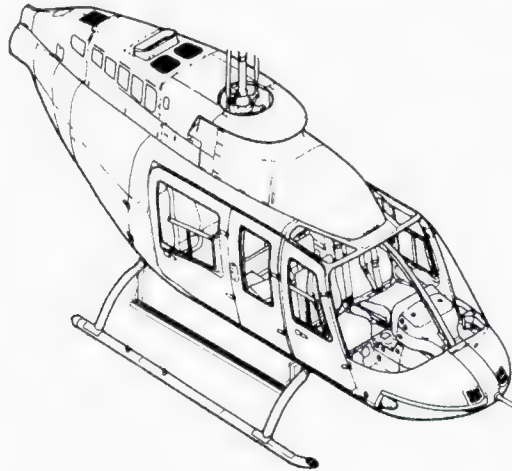


Figure 2 – Low Mounted Quick Release Cargo Basket Configuration

Low Mounted Quick Release Step Configuration

Item	Weight	Longitudinal		Lateral	
		Arm	Moment	Arm	Moment
Step Only <sup>1</sup>	8.2 lb	114.1 in	935.6 in*lb	29.3 in	239.9 in*lb
	3.7 kg	2898 mm	10 723 mm*kg	744 mm	2 754 mm*kg

Low Mounted Quick Release Step Configuration (Stowed Position)

Item	Weight	Longitudinal		Lateral	
		Arm	Moment	Arm	Moment
Step Only <sup>1</sup>	8.2 lb	114.1 in	935.6 in*lb	23.7 in	194.3 in*lb
	3.7 kg	2898 mm	10 723 mm*kg	602 mm	2 227 mm*kg

<sup>1</sup> Weight and balance is for Step only. Mounting beams and attachment provisions are not included since they should have been included in the basic rotorcraft weight and balance at time of initial installation.

## VI INSTALLATION / REMOVAL INSTRUCTIONS

The Quick Release Mounting Provisions are installed in accordance with drawing 70102. The Quick Release Basket is installed in accordance with drawing 70101. The Quick Release Step is installed in accordance with drawing 80002. Removal of the basket or step leaving the beams in place is an approved configuration for flight. Logbook entry indicating installation or removal of basket or step and which weight and balance amendment is in effect is required.

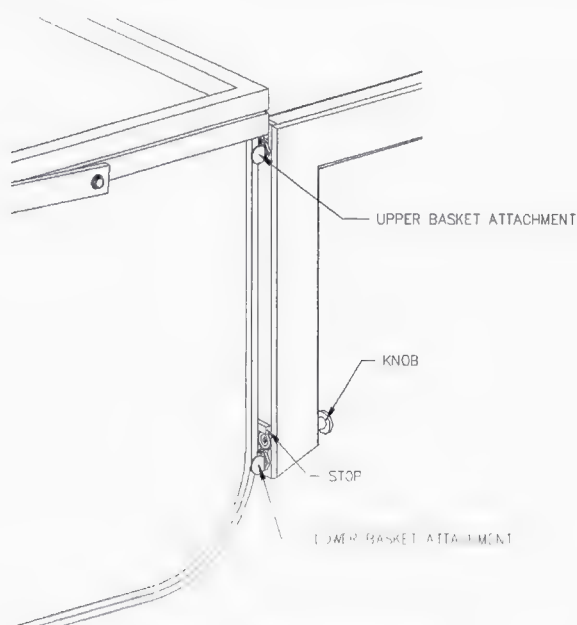


Figure 3 – Basket Attachment

1. Basket Installation - Refer to Figure 3.
  1. Set basket upper attachment into slot on forward and aft beams.
  2. At forward end of basket, lift until lower attachment fitting hits stop over keyway. Push fitting into keyway and slide basket down until locked. Repeat for aft end.
2. Basket Removal - Refer to Figure 3.
  1. Pull knob at bottom end of forward beam and lift basket until lower attachment fitting is free of keyway. Keep upper basket attachment in slot in beam. Repeat for aft end.
  2. Lift basket until upper attachments are out of slots on beams and remove basket from helicopter.

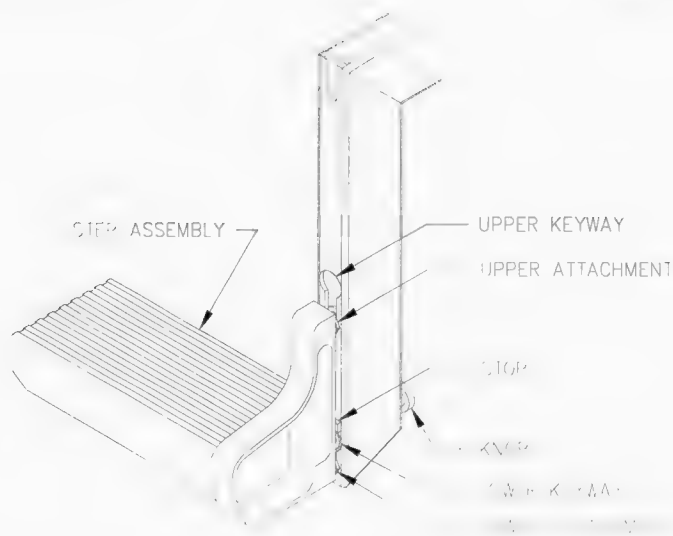


Figure 4 – Step Attachment

3. Step Installation – Refer to Figure 4.
  1. Set upper attachment into upper keyway on forward and aft beams.
  2. Lift step until lower attachment hits stop over keyway. Push fitting into keyway and slid down until locked.
4. Step Removal – Refer to Figure 4.
  1. Pull knob at bottom end of forward beam and lift step until the lower attachment fitting is free of keyway. Keep upper attachment in keyway in beam. Repeat for aft end.
  2. Lift step until upper attachments are out of keyways in beams and remove from helicopter.

## BELL 206L SERIES

### **ROTORCRAFT FLIGHT MANUAL SUPPLEMENT** for the **INSTALLATION of the AERO DESIGN** **QUICK RELEASE CARGO BASKET** **AND/OR QUICK RELEASE STEP**

Supplemental Type Certificate No. SH00-48

Sections I, II, III and IV of this document comprise the Transport Canada Approved sections of this Flight Manual Supplement. Compliance with Section I, Limitations, is mandatory.

Section V and any subsequent sections if present are Unapproved and are provided for information only.

The information and data contained in this Flight Manual Supplement supersede or supplement that contained in the basic Approved Flight Manual for the Bell 206L Series when fitted with the Quick Release Cargo Basket or Quick Release Step Installation. For limitations, procedures and performance not listed in this Flight Manual Supplement, refer to the Approved Flight Manual and other approved Flight Manual Supplements.



## Table of Contents

I	Limitations	3
II	Normal Procedures	3
III	Emergency Procedures	3
IV	Performance	3
V	Weight and Balance	4
VI	Installation / removal instructions	6

## Record of Revisions

Revision	Issue Date	Pages Revised	Date Inserted	By
0	05 May, 2006	None		
1	09 Nov, 2006	2, 6		
2	17 July, 2008	All		

## **I LIMITATIONS**

1. The maximum load in the AERO Design Ltd. Quick Release Cargo Basket is 200 lb. (90.5 kg).
2. Flight operations limited to VFR conditions with AERO Design Ltd. Cargo Basket installed.
3. Quick Release Step may be installed when the basket is removed.

## **II NORMAL PROCEDURES**

1. Pre-flight inspections:
  - a) Ensure that all cargo stored in the cargo basket does not extend outside the basket, is properly tied down and secured for flight.
  - b) Ensure that the lid of cargo basket is closed and secured.
  - c) Ensure the basket is locked in position on the beams. Pull up on the forward and aft end of the basket to check.
  - d) Ensure the step is locked in position on the beams. Pull up on the forward and aft end of the step to check.

### **CAUTION**

It is possible to exceed the lateral centre of gravity limits of the rotorcraft under some loading conditions. Pilots must ensure that lateral C of G is within limits when loading the basket.

## **III EMERGENCY PROCEDURES**

No change from basic Approved Flight Manual.

### **CAUTION:**

The rotorcraft glide angle is steeper than that of the basic helicopter when the AERO Design Ltd. Cargo Basket is installed.

## **IV PERFORMANCE**

Climb performance may be reduced by up to 350 fpm with the basket installed.

Cruise speeds are reduced by approximately 10 mph with the basket installed.

## V WEIGHT AND BALANCE

1. The following weight and balance is for the low mounted quick release cargo basket configuration, installed in accordance with drawing 70201.

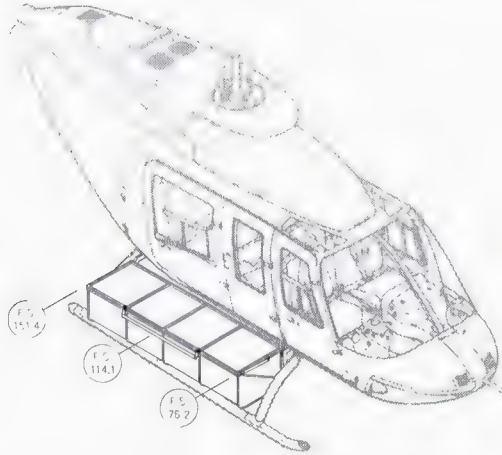


Figure 1 – Low Mounted Quick Release Cargo Basket Configuration

Low Mounted Quick Release Cargo Basket Configuration

Item	Weight	Longitudinal		Lateral	
		Arm	Moment	Arm	Moment
Basket Only <sup>1</sup>	45.0 lb	114.1 in	5134 in*lb	38.5 in	1733 in*lb
	20.4 kg	2898 mm	59 122 mm*kg	978 mm	19 949 mm*kg
Cargo <sup>2</sup> (MAX)	200 lb	114.1 in	22 820 in*lb	38.5 in	7700 in*lb
	90.9 kg	2898 mm	263 467 mm*kg	978 mm	88 900 mm*kg

<sup>1</sup> Weight and balance is for Cargo Basket only. Mounting beams and attachment provisions are not included since they should have been included in the basic rotorcraft weight and balance at time of initial installation.

<sup>2</sup> Longitudinal and Lateral moment arms are given only for the center of the Cargo Basket. Due to the length of the basket, some loading arrangements may require that actual moment arms be measured, to determine the correct moments about the center of gravity.

### CAUTION:

It is possible to exceed lateral CG limits in some configurations.

2. The following weight and balance is for the quick release step configuration, installed in accordance with drawing 80002.

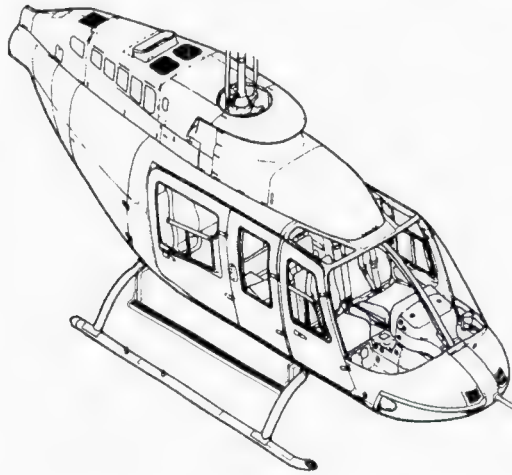


Figure 2 – Low Mounted Quick Release Cargo Basket Configuration

Low Mounted Quick Release Step Configuration

Item	Weight	Longitudinal		Lateral	
		Arm	Moment	Arm	Moment
Step Only <sup>1</sup>	8.2 lb	114.1 in	935.6 in*lb	29.3 in	239.9 in*lb
	3.7 kg	2898 mm	10 723 mm*kg	744 mm	2 754 mm*kg

Low Mounted Quick Release Step Configuration (Stowed Position)

Item	Weight	Longitudinal		Lateral	
		Arm	Moment	Arm	Moment
Step Only <sup>1</sup>	8.2 lb	114.1 in	935.6 in*lb	23.7 in	194.3 in*lb
	3.7 kg	2898 mm	10 723 mm*kg	602 mm	2 227 mm*kg

<sup>1</sup> Weight and balance is for Step only. Mounting beams and attachment provisions are not included since they should have been included in the basic rotorcraft weight and balance at time of initial installation.

## VI INSTALLATION / REMOVAL INSTRUCTIONS

The Quick Release Mounting Provisions are installed in accordance with drawing 70202. The Quick Release Basket is installed in accordance with drawing 70201. The Quick Release Step is installed in accordance with drawing 80002. Removal of the basket or step leaving the beams in place is an approved configuration for flight. Logbook entry indicating installation or removal of basket or step and which weight and balance amendment is in effect is required.

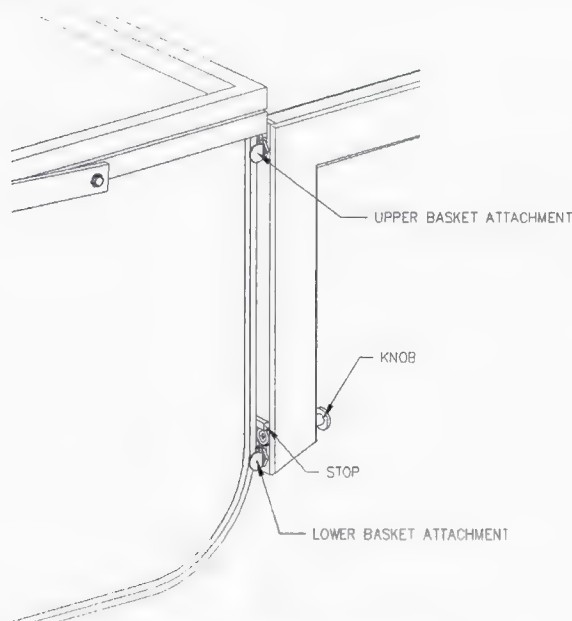


Figure 3 – Basket Attachment

1. Installation - Refer to Figure 3.
  1. Set basket upper attachment into slot on forward and aft beams.
  2. At forward end of basket, lift until lower attachment fitting hits stop over keyway. Push fitting into keyway and slide basket down until locked. Repeat for aft end.
2. Removal - Refer to Figure 3.
  1. Pull knob at bottom end of forward beam and lift basket until lower attachment fitting is free of keyway. Keep upper basket attachment in slot in beam. Repeat for aft end.
  2. Lift basket until upper attachments are out of slots on beams and remove basket from helicopter.

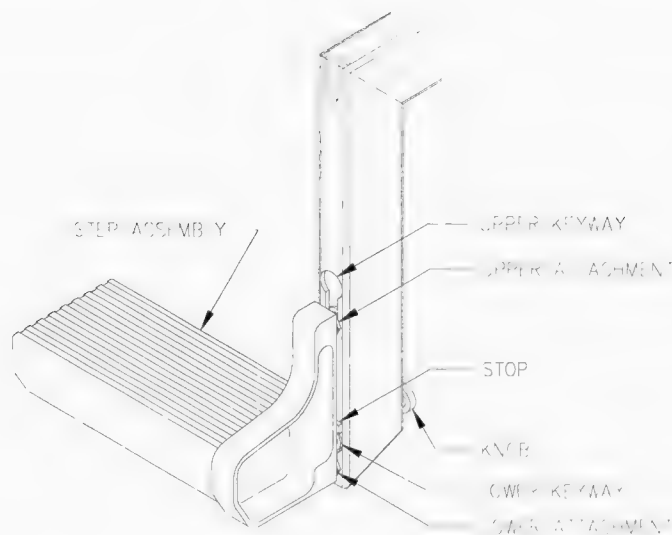


Figure 4 – Step Attachment

## 3. Step Installation – Refer to Figure 4.

1. Set upper attachment into upper keyway on forward and aft beams.
2. Lift step until lower attachment hits stop over keyway. Push fitting into keyway and slid down until locked.

## 4. Step Removal – Refer to Figure 4.

1. Pull knob at bottom end of forward beam and lift step until the lower attachment fitting is free of keyway. Keep upper attachment in keyway in beam. Repeat for aft end.
2. Lift step until upper attachments are out of keyways in beams and remove from helicopter.



## INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA 800.90

---

### QUICK RELEASE STEP

#### Preface

These Instructions for Continued Airworthiness shall be included in the rotorcraft Maintenance Manual when the Quick Release Step assembled in accordance with AERO Design Ltd. Document Control List DCL800-11, Revision 0, or later approved revision, is installed.

The information contained herein supplements the information in the basic Maintenance Manual. For Maintenance practices and procedures not contained in these Instructions for Continued Airworthiness refer to the basic Maintenance Manual and its approved supplements.

Revision 2  
Date: 2 December, 2008

---

AERO Design Ltd.  
Engineering Consultants

2013 – 39<sup>th</sup> Avenue N.E., Calgary, Alberta T2E 6R7  
Phone: (403) 250-8027  
Fax: (403) 250-8333  
E-Mail: [infor@aerodesign.ca](mailto:infor@aerodesign.ca)

---

Notice: This report contains information and data which is proprietary to AERO Design Ltd. This report, or any portion thereof, may not be reproduced, copied, duplicated or used without the written consent of AERO Design Ltd.

**RECORD OF REVISIONS**

Revision Number	Issue Date	Date Inserted	By
0	17 July 2008		Original Issue
1	18 November 2008		
2	2 December 2008		

**LIST OF EFFECTIVE PAGES**

List of Revisions

Revision 0 (Original Issue)  
Revision 1  
Revision 2

17 July, 2008  
18 November, 2008  
2 December, 2008

List of Effective Pages

<u>Description</u>	<u>Pages</u>	<u>Revision No.</u>
Cover	1	2
Revision Record/List of Effective Pages	2	2
Table of Contents	3	2
00-00-00	4-5	2
04-00-00	6	1
05-00-00	7-9	2
25-50-00	10-12	2

**TABLE OF CONTENTS**

RECORD OF REVISIONS	2
LIST OF EFFECTIVE PAGES	2
CHAPTER 0 – INTRODUCTION	4
0-1    SCOPE	4
0-2    DEFINITIONS AND ABBREVIATIONS	4
0-3    DISTRIBUTION	4
0-4    COMPATIBILITY	4
0-5    GENERAL DESCRIPTION	5
CHAPTER 4 - AIRWORTHINESS LIMITATIONS	6
CHAPTER 5 – INSPECTION REQUIREMENTS	7
5-1    INSPECTION SCHEDULE	7
5-2    DAMAGE LIMITS / REPAIR INSTRUCTIONS	8
5-3    PROTECTIVE TREATMENT INFORMATION	9
CHAPTER 25 – EQUIPMENT AND FURNISHINGS	10
25-1    STEP INSTALLATION	10
25-2    STEP REMOVAL	10
25-3    WEIGHT AND BALANCE	11
25-4    STRUCTURAL FASTENER DATA	12

## CHAPTER 0 – INTRODUCTION

### 0-1 SCOPE

The following Instructions for Continued Airworthiness (ICA) satisfy the requirements of 14 CFR 27/29.1529, and provide the information necessary to complete the on-going maintenance and inspections required for rotorcraft embodying the Quick Release Step as described herein.

### 0-2 DEFINITIONS AND ABBREVIATIONS

ICA - Instructions for Continued Airworthiness  
LH - Left Hand  
RH - Right Hand

### 0-3 DISTRIBUTION

Copies of this ICA and amendments shall be distributed to all known purchasers of the Quick Release Step. Requests for a copy may be made in writing to:

AERO Design Ltd.  
2013 39<sup>th</sup> Avenue N.E.  
Calgary, Alberta  
T2E 6R7  
Fax: 403-250-8333  
Email: [info@aerodesign.ca](mailto:info@aerodesign.ca)

Any changes will be sent to Transport Canada. All changes will be recorded in the Record of Revisions page at the front of this document.

### 0-4 COMPATIBILITY

Prior to incorporating this modification, the installer shall establish that the inter-relationship between this change and any other modification(s) incorporated will not adversely affect the airworthiness of the helicopter.

## 0-5 GENERAL DESCRIPTION

The Quick Release Step installation consists of a step assembly which is attached to quick release mounting provisions installed on the helicopter. These mounting provisions are capable of mounting various equipment including cargo baskets.

The step itself consists of an aluminum extrusion attached to brackets on the ends with fittings that lock into the quick release mechanism.

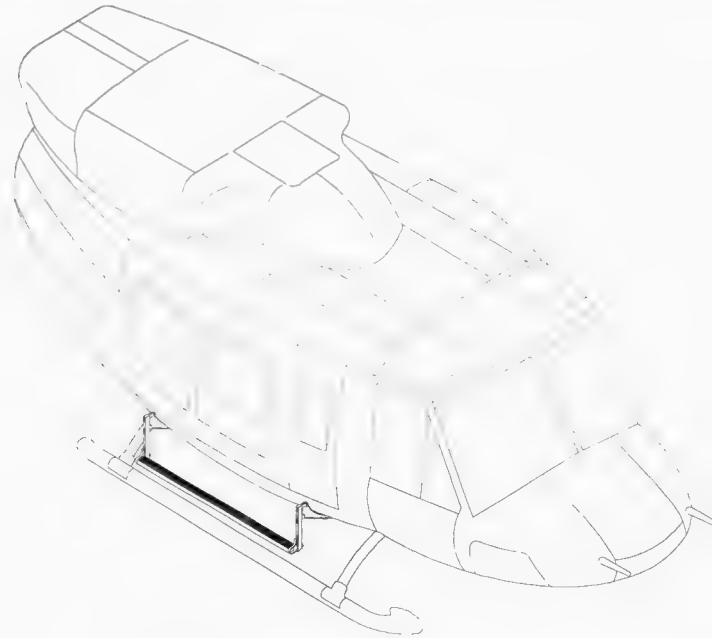


Figure 2a – Bell Medium Step Installation

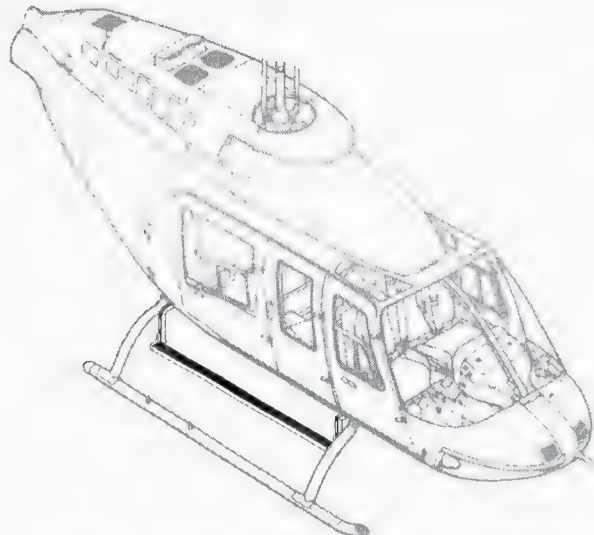


Figure 2b – Bell 206L / 407 Step Installation

## CHAPTER 4 - AIRWORTHINESS LIMITATIONS

### *Transport Canada*

The Airworthiness Limitations section is Transport Canada-approved and specifies maintenance required under Section 571 of the Canadian Aviation Regulations, unless an alternative program has been approved.

### *FAA*

The Airworthiness Limitations section is FAA approved and specifies maintenance required under Sections 43.16 and 91.403 of the Federal Aviation Regulations unless an alternative program has been FAA approved.

No additional airworthiness limitations have been imposed due to installation of the Quick Release Step.



## CHAPTER 5 – INSPECTION REQUIREMENTS

### 5-1 INSPECTION SCHEDULE

Continued airworthiness is contingent upon compliance with the following inspection items. These items shall be completed in conjunction with the rotorcraft Maintenance Inspection schedule, or other approved program, or upon removal and replacement of any component of Quick Release Step.

#### *Daily Inspection*

##### 1. Inspection Area: Step

- a) Inspect the step attachment to the beams for condition and security. Ensure quick release mechanism is completely extended, flush with the outboard surface of the beam.

#### *300 Hour or Annual Inspection*

Refer to the ICA for the Quick Release Cargo Basket for each specific model of helicopter for inspection of mounting provisions.

##### 1. Inspection Area: Step

- a) Visually inspect welds attaching end brackets to step extrusion for cracks, corrosion or other damage.
- b) Visually inspect step for damage.
- c) Visually inspect lugs attaching the step to the beams for security and damage.

#### *Special Inspections*

Following a hard landing inspect the Quick Release Step installation in accordance with the 300 hour or annual inspection listed above.

## 5-2 DAMAGE LIMITS / REPAIR INSTRUCTIONS

Refer to the ICA for the Quick Release Cargo Basket for each specific model of helicopter for further limits and repair instructions.

If damage is found in the inspections above, repair in accordance with the instructions below.

### 1. Step Assembly

Part	Type of Damage	Max. Allowable	Repair
Step End Bracket	Corrosion	0.010" deep	Blend up to 0.010" deep with scotchbrite.
	Scratches / Nicks	0.010" deep x 0.5" long	Blend up to 0.010" deep with scotchbrite.
	Cracks/Dents	None	N/A
	Bent Lugs	None	N/A
Centre Step Section	Corrosion	2" x 2" x 0.010" deep	Blend up to 0.010" deep with scotchbrite.
	Scratches / Nicks	0.010" deep x 1" long	Blend up to 0.010" deep with scotchbrite.
	Cracks / Dents	None	N/A
	Permanent Deflection of Step	0.25" max at middle of step	None

### 2. Steel Beams

Part	Type of Damage	Max. Allowable	Repair
Steel Beam	Corrosion	0.030" deep	Blend up to 0.030" deep with scotchbrite.
	Scratches / Nicks (Outboard face)	0.030" deep x 0.125" wide	Blend up to 0.030" deep with scotchbrite.
	Scratches / Nicks (all other sides)	0.060" deep x 0.125" wide	Blend up to 0.060" deep with scotchbrite.
	Cracks/Dents	None	N/A
	Elongation of Keyway	See figure 3	None
	Widening of slots	27/64" (0.422) diameter (check with a 27/64" drill)	None

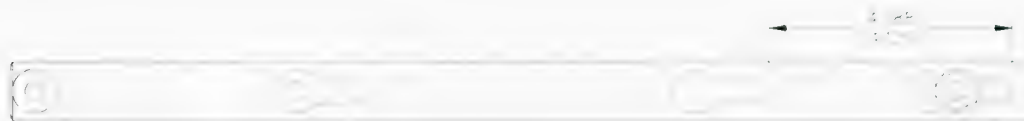


Figure 3 – Critical Keyway dimensions  
(Bell Medium beam shown, Bell 206L/407 critical keyway same)

### 3. Step Welds

Cracks up to 0.25" long may be repaired as follows:

- a) Clean area of paint.
- b) Grind away weld in area of crack.
- c) T.I.G. weld per MIL-STD-2219 Class "C" using ER4043 filler rod. Do not grind flush.
- d) Touch up paint as noted in section 5-3.

## 5-3 PROTECTIVE TREATMENT INFORMATION

### 1. Step Assembly

The Step Assembly is supplied powder coated white. If the powder coat is damaged, touch up with white polyurethane paint. The tread area is painted with anti-skid paint. If the anti-skid paint is damaged, touch up with Randolph X1567 Wingwalk grip paint or equivalent.

## CHAPTER 25 – EQUIPMENT AND FURNISHINGS

The Quick Release Step Installation may be applied to the right and/or left side of the helicopter. A stowed position located on the inboard side of the mounting provisions is provided on some configurations. Refer to the ICA for the Quick Release Cargo Basket for each specific model of helicopter for installation and removal instructions for the mounting provisions.

### 25-1 STEP INSTALLATION

Refer to Figure 4.

1. Set upper attachment into upper keyway in forward and aft beams.
2. Lift step until lower attachment fitting hits stop. Push fitting into keyway and slide step down until locked.

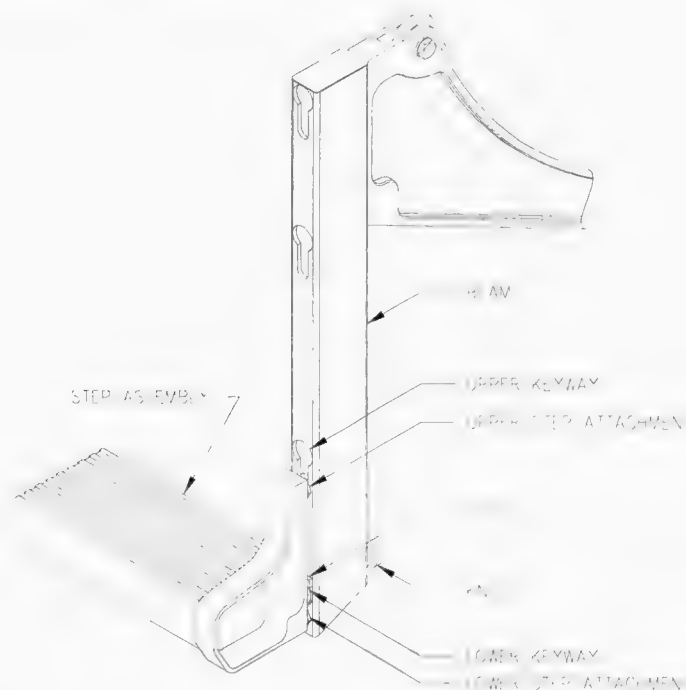


Figure 4 – Step Attachment

(Bell Medium Attachment shown, Bell 206L/407 attachments same)

### 25-2 STEP REMOVAL

Refer to Figure 4.

1. Pull knob at bottom end of forward beam and lift step until lower attachment fitting is free of keyway. Keep upper attachment in keyway on beam.
2. Pull knob at bottom end of aft beam and lift step until lower attachment fitting is free of keyway. Keep upper attachment in keyway on beam.
3. Lift step until upper attachments are out of keyways on both beams and remove from helicopter.

**25-3 WEIGHT AND BALANCE**

Different weight and balance configurations are required for the pilot as the step may be removed/installed in the field by the pilot. The first is the installation of Provisions only. The second is Provisions and Step. The third is Provisions and Step in the stowed position.

**Bell 205A-1 / 212 / 412 Series**

Configuration 1 – Provisions Only		Weight (lbs)	Longitudinal		Lateral	
Part #	Name		Arm (in)	Moment (in-lbs)	Arm (in)	Moment (in-lbs)
75115-01	Forward Beam Assembly	5.0	84.5	422.5	46.0	230.0
75116-01	Aft Beam Assembly	4.6	155.1	713.5	47.3	217.6
75102-01	Provisions Installation (Total)	9.6	118.3	1136.0	46.6	447.6

Configuration 2 – Step and Provisions		Weight (lbs)	Longitudinal		Lateral	
Part #	Name		Arm (in)	Moment (in-lbs)	Arm (in)	Moment (in-lbs)
75102-01	Provisions Installation	9.6	118.3	1136.0	46.6	447.6
80010-7100	Step	7.8	119.8	934.4	52.2	407.1
80001-01	Step Installation (Total)	17.4	119.0	2070.4	49.1	854.7

Configuration 3 – Step and Provisions (Stowed)		Weight (lbs)	Longitudinal		Lateral	
Part #	Name		Arm (in)	Moment (in-lbs)	Arm (in)	Moment (in-lbs)
75102-01	Provisions Installation	9.6	118.3	1136.0	46.6	447.6
80010-7100	Step	7.8	119.8	934.4	46.6	363.5
80001-01	Step Installation (Total)	17.4	119.0	2070.4	46.6	811.1

Note: Lateral arms are given for right side installation. For installation on left side, lateral arms are negative.

**Bell 206L Series / 407**

Configuration 1 – Provisions Only		Weight (lbs)	Longitudinal		Lateral	
Part #	Name		Arm (in)	Moment (in-lbs)	Arm (in)	Moment (in-lbs)
70102-01	Provisions Installation (407)	19.9	113.3	2255.3	11.7	233.6
70202-01	Provisions Installation (206L)					

Configuration 2 – Step and Provisions		Weight (lbs)	Longitudinal		Lateral	
Part #	Name		Arm (in)	Moment (in-lbs)	Arm (in)	Moment (in-lbs)
	Provisions Installation	19.9	113.3	2255.3	11.7	233.6
80010-7475	Step	8.2	114.1	935.6	29.3	239.9
80001-01	Step Installation (Total)	28.1	113.6	3190.9	16.9	473.5

Configuration 3 – Step and Provisions (Stowed)		Weight (lbs)	Longitudinal		Lateral	
Part #	Name		Arm (in)	Moment (in-lbs)	Arm (in)	Moment (in-lbs)
	Provisions Installation	19.9	113.3	2255.3	11.7	233.6
80010-7475	Step	8.2	114.1	935.6	23.7	194.3
80001-01	Step Installation (Total)	28.1	113.6	3190.9	15.2	427.9

## **25-4 STRUCTURAL FASTENER DATA**

Refer to Standard Practices Manual for torque values not listed in this ICA.



***AERO*** Design Ltd.

**ENGINEERING REPORT  
ER800.02**

---

**QUICK RELEASE STEP INSTALLATION**

**Bell 206L Series, 407**

Approved: E. Burgoin, P. Eng.

Prepared by: Jeff Clarke

Revision 0  
Date: 12 November, 2008

---

***AERO*** Design Ltd.  
Engineering Consultants

2013 – 39<sup>th</sup> Avenue N.E., Calgary, Alberta T2E 6R7  
Phone: (403) 250-8027  
Fax: (403) 250-8333  
E-Mail: [info@aerodesign.ca](mailto:info@aerodesign.ca)

---

Notice: This report contains information and data which is proprietary to ***AERO*** Design Ltd. This report, or any portion thereof, may not be reproduced, copied, duplicated or used without the written consent of ***AERO*** Design Ltd.

**TABLE OF CONTENTS**

1.0	INTRODUCTION	3
2.0	REFERENCE	3
3.0	BASIS OF CERTIFICATION	3
4.0	ANALYSIS OF CURRENT AIRWORTHINESS DIRECTIVES (AD'S)	3
5.0	LOADS	4
5.1	Inertia Loads	4
5.2	Aerodynamic Load	4
6.0	STRUCTURAL COMPLIANCE	5
7.0	COMPLIANCE WITH 27.251 AND 27.629	6

## 1.0 INTRODUCTION

When the quick release cargo basket is removed from the helicopter, it is desirable to install a flight step to aid ingress and egress from the cabin without removing the basket provisions. This installation uses the existing mounting beams for the cargo baskets and uses the same locking mechanism to retain the step in place.

## 2.0 REFERENCE

AERO Design Ltd. Drawings 80002

MIL-HDBK-5J

## 3.0 BASIS OF CERTIFICATION

*Bell 407, TCDS H-92 (Highest of Bell 206L Series and 407):*

FAR part 27, dated October 2, 1964 Amendment 27-1 through 27-30; Paragraph 27.561(b)(3) at Amdt 27-24; Section 27.563 at Amdt. 27-25; Section 27.785 at Amdt 27-24; Section 27.1093 at amendment 27-8; and Section 27.173 and 27.175 at amendment 27-1.

Exemptions to FAR 27 are the deletion of sections: 27.562, 27.1195, and 27.952(b)(1).

*This installation:*

Same as the basis of certification for each model as shown above.

## 4.0 ANALYSIS OF CURRENT AIRWORTHINESS DIRECTIVES (AD'S)

This installation does not impact on any current ADs.

## 5.0 LOADS

### 5.1 Inertia Loads

$$W_{\text{step}} = 8.5 \text{ lbs}$$

Weight of step

$$n_{\text{man\_pos}} = 3.5$$

Limit positive maneuvering load factor (Ref: FAR 27.337)

$$n_{\text{sf}} = 1.5$$

Safety Factor (Ref: FAR 27.303)

$$n_{\text{ult\_man\_pos}} = n_{\text{man\_pos}} \times n_{\text{sf}}$$

$$n_{\text{ult\_man\_pos}} = 3.5 \times 1.5 = 5.25$$

Ultimate positive maneuvering load factor

$$P_{\text{ult\_man\_pos}} = W_{\text{step}} \times n_{\text{ult\_man\_pos}}$$

$$P_{\text{ult\_man\_pos}} = 44.6 \text{ lbs}$$

Ultimate positive maneuvering load

The quick release step is not intended to be used in flight. As such, there is no requirement for the application of maneuvering inertia loads due to a person on the step. However, the step is checked for ultimate inertia load applied by two people to allow for the possibility of use during rappel or similar operations.

$$W_{\text{person}} = 170 \text{ lbs}$$

Weight of person

$$P_{\text{ult\_man\_pos}} = W_{\text{person}} \times 2 \times n_{\text{ult\_man\_pos}}$$

$$P_{\text{ult\_man\_pos}} = 1785 \text{ lbs}$$

Ultimate positive maneuvering load applied to step by 2 people

### 5.2 Aerodynamic Load

Drag

$$A_f := 10.2 \cdot \text{in}^2$$

Frontal Area of Step

$$V_{\text{ne}} := 155 \cdot \text{knots}$$

Never Exceed Speed of AS350/AS355/EC135  
(Highest of all models)

$$V_d := \frac{V_{\text{ne}}}{0.9}$$

$$V_d = 172.2 \cdot \text{knots}$$

Design Dive Speed

$$\rho := 0.002378 \cdot \frac{\text{slug}}{\text{ft}^3}$$

Air Density at Sea Level

$C_{Do} := 2.0$  Coefficient of Drag (conservative)

$$P_{drag} := \frac{\rho}{2} \cdot V_d^2 \cdot A_f \cdot C_{Do}$$

$P_{drag} = 14.2 \cdot \text{lbf}$  Limit drag at  $V_d$

$n_{sf} := 1.5$  Factor of Safety

$$P_{drag\_ult} := P_{drag} \cdot n_{sf}$$

$P_{drag\_ult} = 21.3 \cdot \text{lbf}$  Ultimate drag at  $V_d$

#### Lift

$$A_{lift} := 3.4 \cdot \text{in} \cdot 73.75 \cdot \text{in}$$

$A_{lift} = 250.7 \cdot \text{in}^2$  Planar area of step (largest)

Coefficient of lift for round tubes relative to airflow varies from near 0 at  $0^\circ$ , to 0.4 at about  $60^\circ$ .

$C_L := 0.4$  Coefficient of lift (Max. for a round tube,  $\sim 60^\circ$  to air flow)  
(ref. Hoerner, Fig. 18)

$$P_{lift} := C_L \cdot \frac{\rho}{2} \cdot V_d^2 \cdot A_{lift}$$

$P_{lift} = 69.9 \cdot \text{lbf}$  Limit lift on step at  $V_d$

$$P_{lift\_ult} := P_{lift} \cdot n_{sf}$$

$P_{lift\_ult} = 104.8 \cdot \text{lbf}$  Ultimate lift on step at  $V_d$

## 6.0 STRUCTURAL COMPLIANCE

The aerodynamic drag load is very small and by inspection can be carried by the step assembly and its attachments.

The aerodynamic lift generated by the step is applied similar to the down load tested below, only upward. The downward test is sufficient to demonstrate the lift load.

A Quick Release Step Assembly was fabricated to fit a Bell Medium (71.00 inches centre to centre on the lugs). The down tubes with keyways (75132-01) were bolted to lugs welded to a large I beam, using the bottom hole to simulate the actual attachment.

The step was loaded with 1800 lbs of lead shot (72 bags @ 25 lbs), evenly distributed over the surface of the step. It was checked for deflection before, during, and after the test.

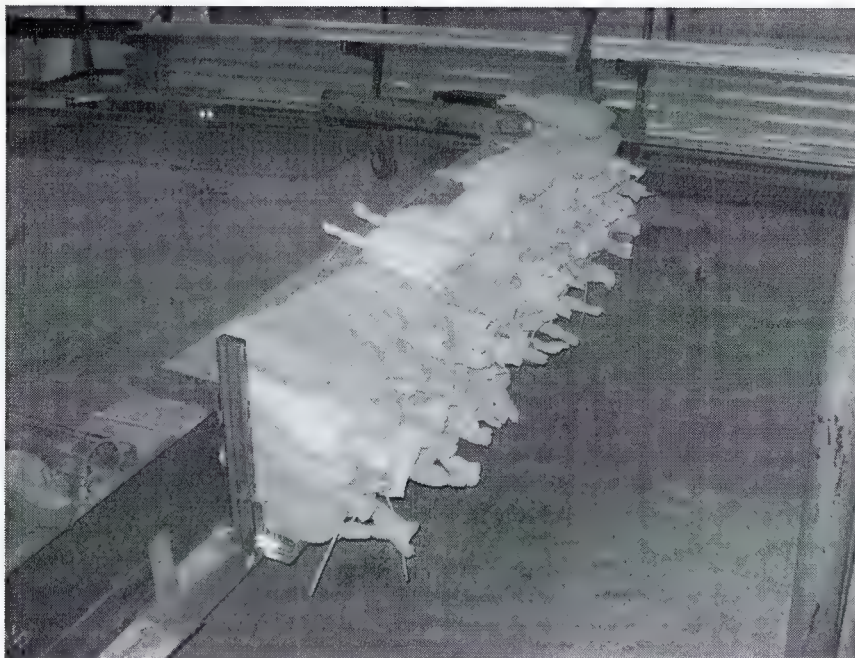


Figure 1 – Ultimate Maneuvering Load on Step Assembly  
(Bell Medium Step Assembly)

At ultimate load there was almost 2 inches of deflection. With the load removed there was no permanent deformation found. The Bell 206L/407 Step is 3.75" longer than the Bell Medium Step tested. Since there was no permanent deformation at ultimate load, the slight increase in length will not result in failure at ultimate load.

The beams and helicopter attachments have been demonstrated to sustain no permanent deformation at 600 lbs limit maneuvering load, and no failure at 925 lbs ultimate maneuvering load per beam. Refer to TR698.02. The applied loads from this installation are within the loads tested for the beams and attachments. The installation is acceptable for installation on Bell 206L Series and 407 helicopters.

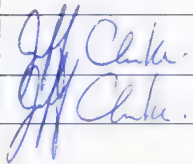
## 7.0 COMPLIANCE WITH 27.251 AND 27.629

The frontal and planar area of the step is significantly smaller than the area of the cargo basket which uses the same mounting provisions. The step section is a closed section so it is torsionally rigid and will not allow flexing between the attachments. The conclusion that can be drawn from these properties is that the aerodynamic loading or turbulence shedding from the step will be significantly less than from the basket, and are expected to be similar to the basic unmodified helicopter.

The effects of vibration (27.251) and flutter (27.629) have been considered over the flight regime of the helicopter, and there is no effect.



# CONFORMITY INSPECTION RECORD

<b>Applicant</b> AERO Design Ltd.	<b>Aeronautical Product</b>				<b>Title of Change</b> Quick Release Step
	<b>Make</b> Bell	<b>Model</b> 206L Series, 407	<b>Serial No.</b> N/A	<b>Registration</b> N/A	
<b>Drawing No.</b>	<b>Applicant's Inspector</b> Signature                      Date		<b>T.C. Inspection</b> Signature                      Date		<b>Findings</b>
Step					
80010 (Assembly)					
80020 (End Fab.)					

## APPLICANT'S ATTESTATION

I hereby confirm that the prototype installation for the subject

☒ MODIFICATION,

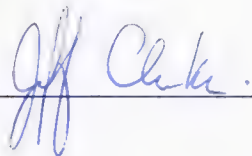
☐ REPAIR,

☐ TSO/AP-TC ARTICLE

is in conformity with the applicable installation drawing(s) listed above  
and that necessary ground tests have been carried out.  
[Please check (✓) the applicable box.]

Additional Information:

Signature: \_\_\_\_\_



## TC INSPECTION

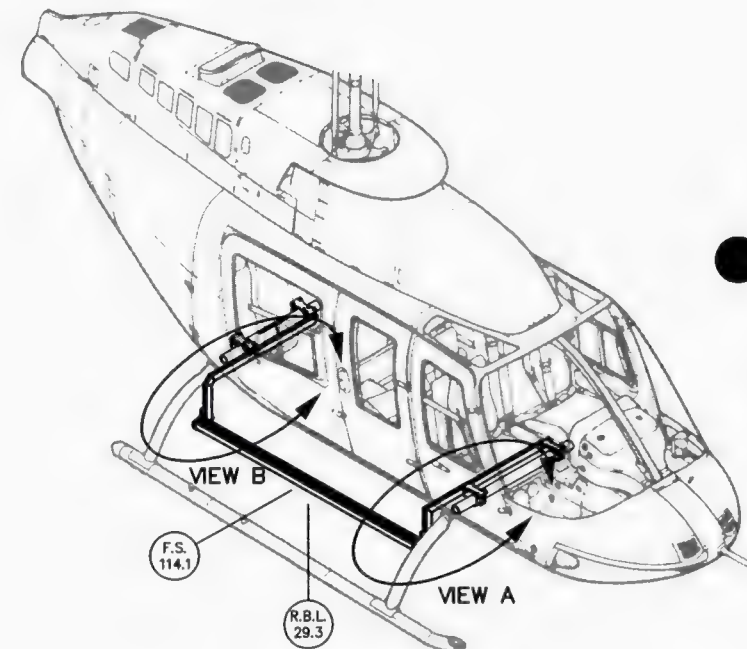
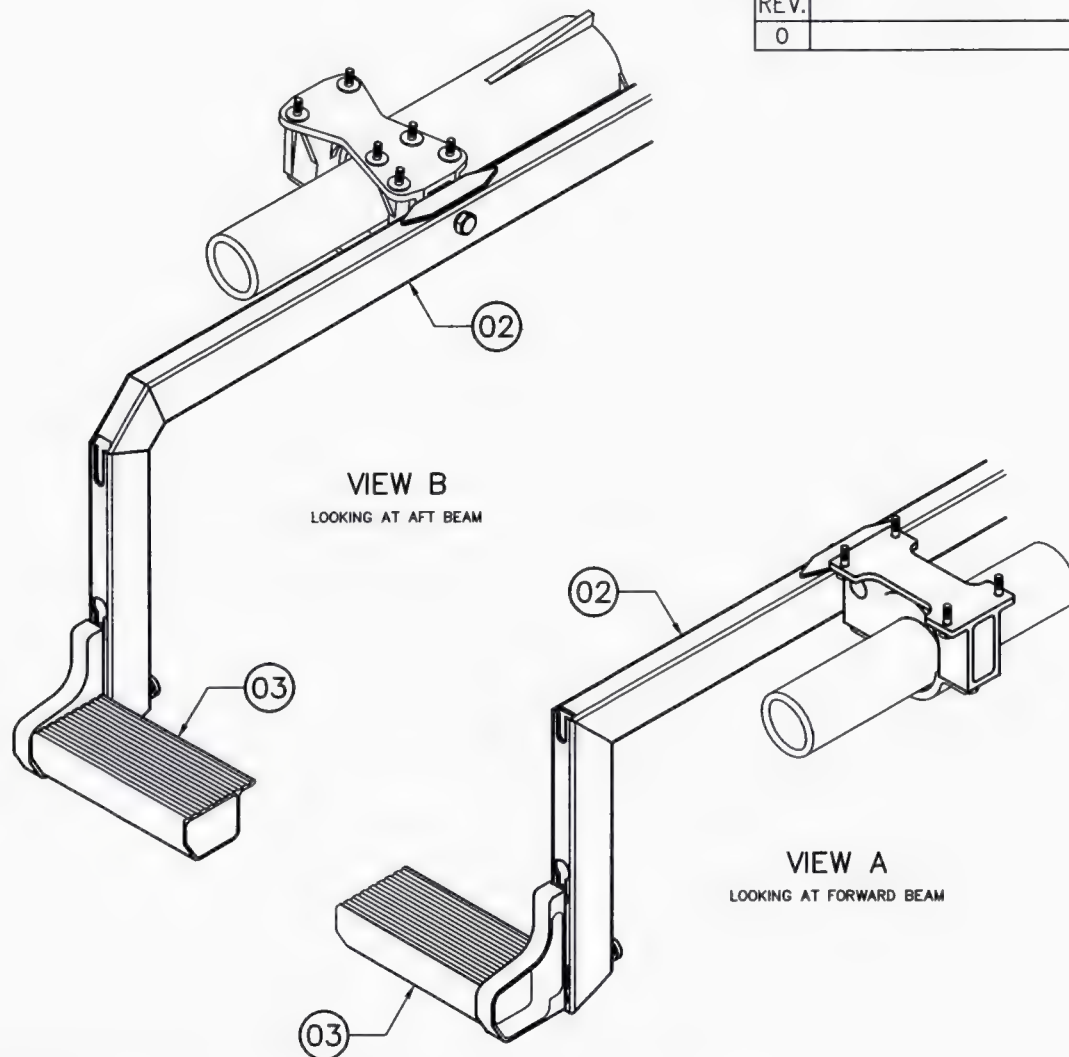
☐ ACCEPTABLE

☐ UNACCEPTABLE

Remarks:

Signature: \_\_\_\_\_

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE	BJC	JULY 15/08



1	80010-7475	03	STEP ASS'Y (74.75 LONG)
1	70202-01	02	PROVISIONS INST'N (206L)
1	70102-01	02	PROVISIONS INST'N (407)
	80002-01	01	INSTALLATION
QTY.	PART NO.	ITEM	DESCRIPTION
LIST OF MATERIALS			

APPROVALS	DATE
DRAWN: JEFF CLARKE	15 JULY 2008
CHECKED: E. BURGOIN	

**AERO DESIGN LTD.**  
CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M  
2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7  
tel: (403) 250-8027 fax: (403) 250-8333 aerodesign@telusplanet.net

--- NOTICE ---  
THIS DRAWING CONTAINS INFORMATION AND DATA WHICH IS PROPRIETARY TO AERO DESIGN LTD. THIS DRAWING, OR ANY PORTION THEREOF, MAY NOT BE REPRODUCED, COPIED, OR DUPLICATED IN ANY MANNER, NOR USED FOR MANUFACTURING WITHOUT THE WRITTEN CONSENT OF AERO DESIGN LTD. BY ACCEPTING THIS DRAWING FOR REFERENCE, THE RECIPIENT AGREES TO HOLD AERO DESIGN LTD. HARMLESS FROM THE USE, OR MISUSE, OF THIS DRAWING OR THE INFORMATION CONTAINED THEREON.

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES.  
TOLERANCES ON:  
DECIMALS ANGLES  
X.XXX  $\pm 0.010$   $\pm 1/2^\circ$   
X.XX  $\pm 0.03$   
X.X  $\pm 0.1$

BELL 206L SERIES & 407 QUICK RELEASE STEP STEP INSTALLATION			
NOT TO SCALE	DWG. SIZE	DWG. NO.	REV.
SHEET 1 OF 2	A4	80002	0

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE	BJC	JULY 15/08

NOTES:

1. QUICK RELEASE MOUNTING PROVISIONS INSTALLED IN ACCORDANCE WITH DRAWING 70102 (BELL 407) OR 70202 (BELL 206L SERIES) IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
2. HIGH SKID GEAR INSTALLATION IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
3. REFER TO FLIGHT MANUAL SUPPLEMENT FMS701.90 (BELL 407) OR FMS702.90 (BELL 206L SERIES) FOR LIMITATIONS WITH THE QUICK RELEASE STEP INSTALLED.
4. REFER TO INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA800.90 FOR MAINTENANCE INFORMATION.

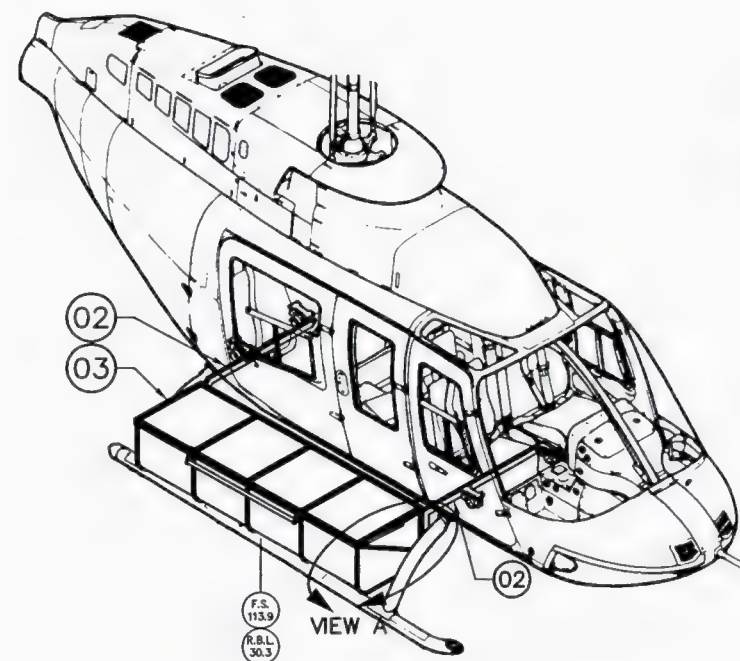
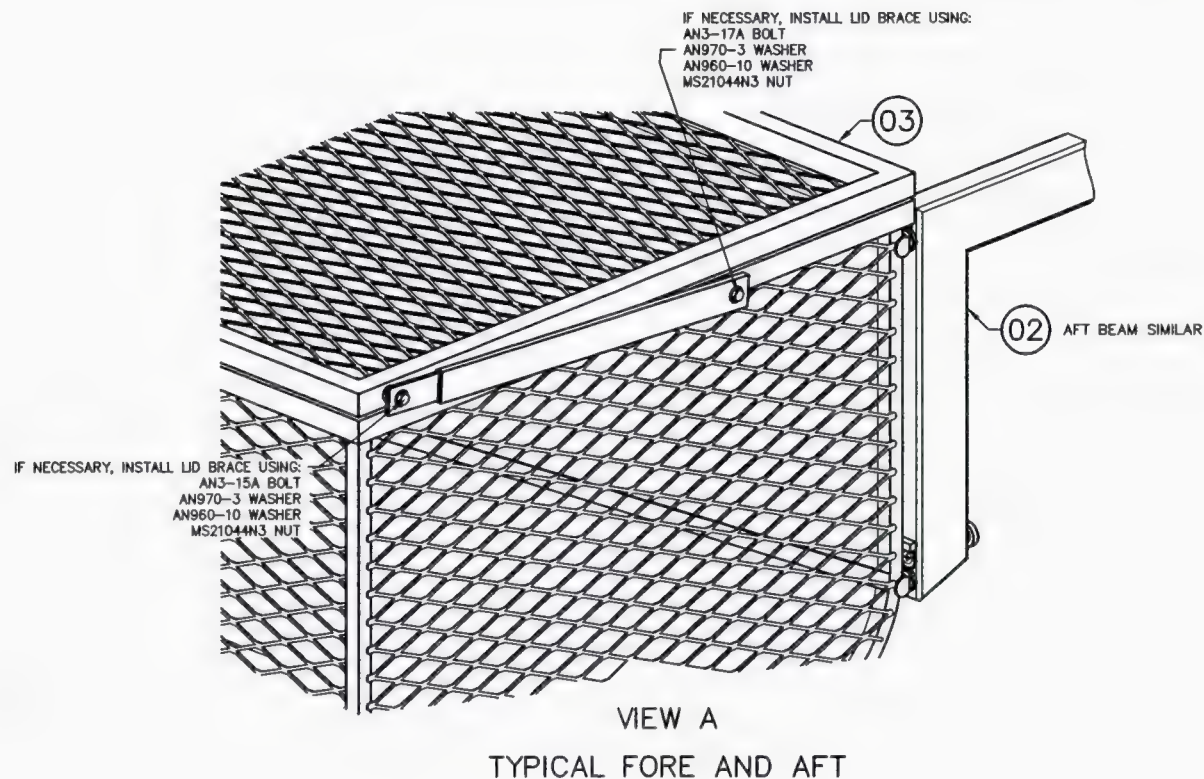
## WEIGHT AND BALANCE

ITEM	DESCRIPTION	WEIGHT (LB)	LONGITUDINAL		LATERAL	
			ARM (IN)	MOMENT (LB-IN)	ARM (IN)	MOMENT (LB-IN)
02	MOUNTING PROVISIONS INSTALLATION	19.9	113.3	2255.3	11.7	233.6
03	STEP ASSEMBLY (74.75 LONG)	8.2	114.1	935.6	29.3	239.9
01	STEP INSTALLATION	28.1	113.6	3190.9	16.9	473.5

APPROVALS		DATE		<b>AERO DESIGN LTD.</b> CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M 2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7 tel: (403) 250-8027 fax: (403) 250-8333 aerodesign@telusplanet.net			
DRAWN: JEFF CLARKE		15 JULY 2008					
CHECKED: E. BURGAIN							
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON: DECIMALS      ANGLES X.XXX ±0.010      ±1/2° X.XX ±0.03 X.X ±0.1				BELL 206L SERIES & 407 QUICK RELEASE STEP STEP INSTALLATION			
NOT TO SCALE		DWG. SIZE	DWG. NO.	REV.			
SHEET 2 OF 2		A4	800002	0			



REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE	BJC	APR 17/06
1	UPPER BEAM ATTACHMENT CHANGED	BJC	NOV 09/06
2	ADD ELIGIBLE BEAM ASSEMBLIES	BJC	JUNE 29/07
3	DRAWING RESIZED, PROVISIONS MOVED TO DRAWING 70102	BJC	JULY 15/08



01 INSTALLATION

1	69810-01	03	CARGO BASKET ASSEMBLY
1	70202-01	02	PROVISIONS INSTALLATION
	70201-01	01	INSTALLATION
01	PART NO.	ITEM	DESCRIPTION
QTY.	LIST OF MATERIALS		

APPROVALS	DATE
DRAWN: JEFF CLARKE	17 APR 2006
CHECKED: E. BURGOIN	

**AERO DESIGN LTD.**  
CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M  
2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7  
tel: (403) 250-8027 fax: (403) 250-8333 aerodesign@telusplanet.net

--- NOTICE ---  
THIS DRAWING CONTAINS INFORMATION AND DATA WHICH IS PROPRIETARY TO AERO DESIGN LTD. THIS DRAWING, OR ANY PORTION THEREOF, MAY NOT BE REPRODUCED, COPIED, OR DUPLICATED IN ANY MANNER, NOR USED FOR MANUFACTURING WITHOUT THE WRITTEN CONSENT OF AERO DESIGN LTD. BY ACCEPTING THIS DRAWING FOR REFERENCE, THE RECIPIENT AGREES TO HOLD AERO DESIGN LTD. HARMLESS FROM THE USE, OR MISUSE, OF THIS DRAWING OR THE INFORMATION CONTAINED THEREON.

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES.  
TOLERANCES ON:  
DECIMALS ANGLES  
X.XXX  $\pm 0.010$   $\pm 1/2^\circ$   
X.XX  $\pm 0.03$   
X.X  $\pm 0.1$

**BELL 206L SERIES  
QUICK RELEASE CARGO BASKET  
INSTALLATION**

NOT TO SCALE	DWG. SIZE	DWG. NO.	REV.	
SHEET 1 OF 2	A4	70201	3	

NOTES:

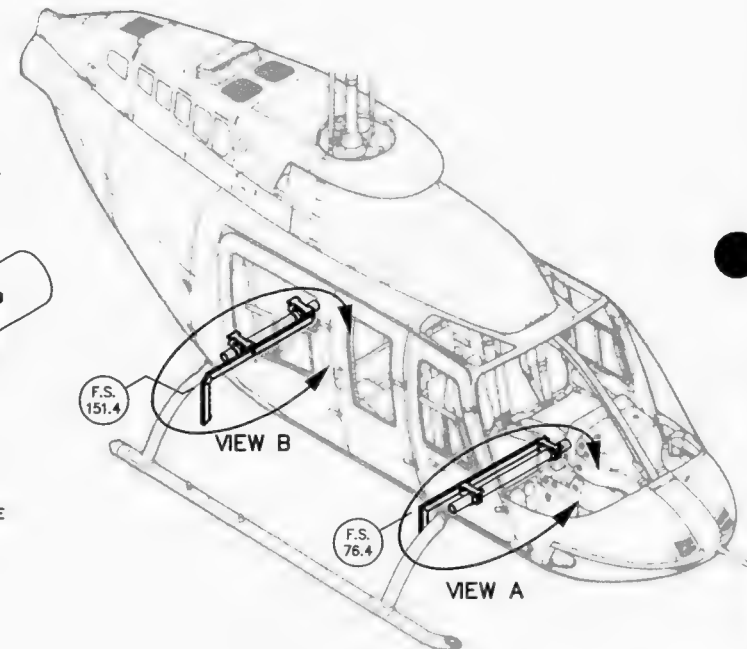
1. EXTERNAL ATTACHMENT PROVISIONS INSTALLED IN ACCORDANCE WITH DRAWING 49301 IS MANDATORY PREREQUISITE FOR THIS INSTALLATION. QUICK RELEASE MOUNTING PROVISIONS INSTALLED IN ACCORDANCE WITH DRAWING 70202 IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
2. HIGH SKID GEAR INSTALLATION IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
3. SEE FLIGHT MANUAL SUPPLEMENT, FMS702.90, FOR LIMITATIONS ON HELICOPTER OPERATIONS WITH CARGO BASKET INSTALLED.
4. SEE INSTRUCTIONS FOR CONTINUED AIRWORTHINESS, ICA698.90, FOR MAINTENANCE INFORMATION.
5. BEAMS (73030-01 AND 73031-01) ARE USED FOR INSTALLATION OF EQUIPMENT ON BOTH LEFT AND RIGHT SIDES. PROVISIONS FOR INSTALLING THE QUICK RELEASE CARGO BASKET (69810-01) ON THE RIGHT SIDE IS PROVIDED.

## WEIGHT AND BALANCE

ITEM	DESCRIPTION	WEIGHT (LB)	LONGITUDINAL		LATERAL	
			ARM (IN)	MOMENT (LB-IN)	ARM (IN)	MOMENT (LB-IN)
01	CARGO BASKET INSTALLATION (CARGO BASKET AND MOUNTING PROVISIONS)	64.9	113.9	7390	30.3	1966
	CARGO	200 MAX	114.1	22820	38.5	7700

APPROVALS		DATE		<b>AERO DESIGN LTD.</b> CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M 2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7 tel: (403) 250-8027 fax: (403) 250-8333 aerodesign@telusplanet.net			
DRAWN: JEFF CLARKE		17 APR 2006					
CHECKED: E. BURGOIN							
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON: DECIMALS                      ANGLES X.XXX ±0.010                      ±1/2° X.XX ±0.03 X.X ±0.1				BELL 206L SERIES QUICK RELEASE CARGO BASKET INSTALLATION			
NOT TO SCALE		DWG. SIZE	DWG. NO.	REV.			
SHEET 2 OF 2		A4	70201	3			

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE	BJC	JULY 15/08



## ① INSTALLATION

				APPROVALS	DATE	<b>AERO DESIGN LTD.</b>				
4	AN960-616		WASHER	DRAWN:	JEFF CLARKE	15 JULY 2008	CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M			
4	AN6-20A		BOLT	CHECKED:	E. BURGOIN		2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7			
1	73031-02	03	AFT BEAM (ALTERNATE)				tel: (403) 250-8027 fax: (403) 250-8333 aerodesign@telusplanet.net			
1	69831-02	03	AFT BEAM (ALTERNATE)			UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON: DECIMALS ANGLES X.XXX ±0.010 ±1/2" X.XX ±0.03 X.X ±0.1	BELL 206L SERIES QUICK RELEASE MOUNTING PROVISIONS PROVISIONS INSTALLATION			
1	69831-01	03	AFT BEAM							
1	73030-02	02	FORWARD BEAM (ALTERNATE)							
1	69830-02	02	FORWARD BEAM (ALTERNATE)							
1	69830-01	02	FORWARD BEAM							
	70202-01	01	INSTALLATION							
01	PART NO.	ITEM	DESCRIPTION			NOT TO SCALE	DWG. SIZE	DWG. NO.	REV.	
QTY.	LIST OF MATERIALS					SHEET 1 OF 2	A4	70202	0	



NOTES:

1. EXTERNAL ATTACHMENT PROVISIONS INSTALLED IN ACCORDANCE WITH DRAWING 49301 IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
2. HIGH SKID GEAR INSTALLATION IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
3. BEAMS (73030-01 AND 73031-01) ARE USED FOR INSTALLATION OF EQUIPMENT ON BOTH LEFT AND RIGHT SIDES. PROVISIONS FOR INSTALLING THE QUICK RELEASE CARGO BASKET (69810-01) ON THE RIGHT SIDE IS PROVIDED.

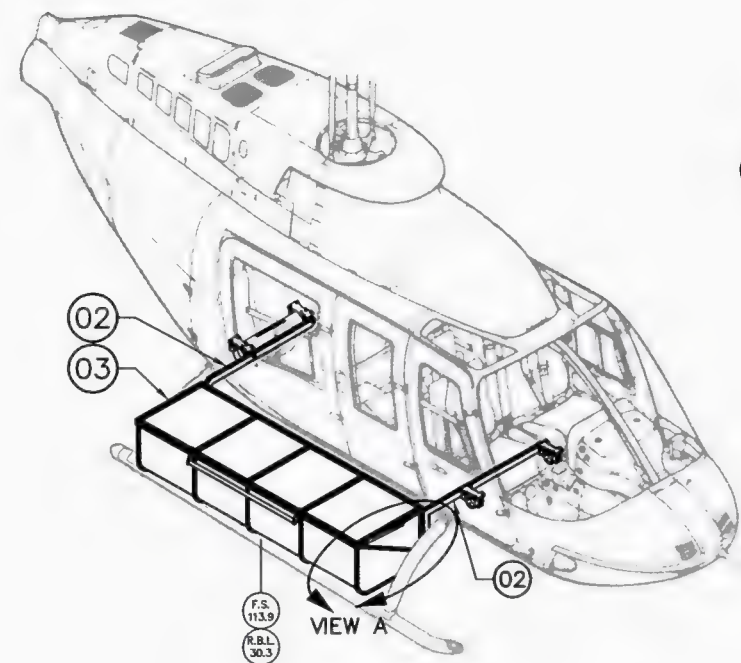
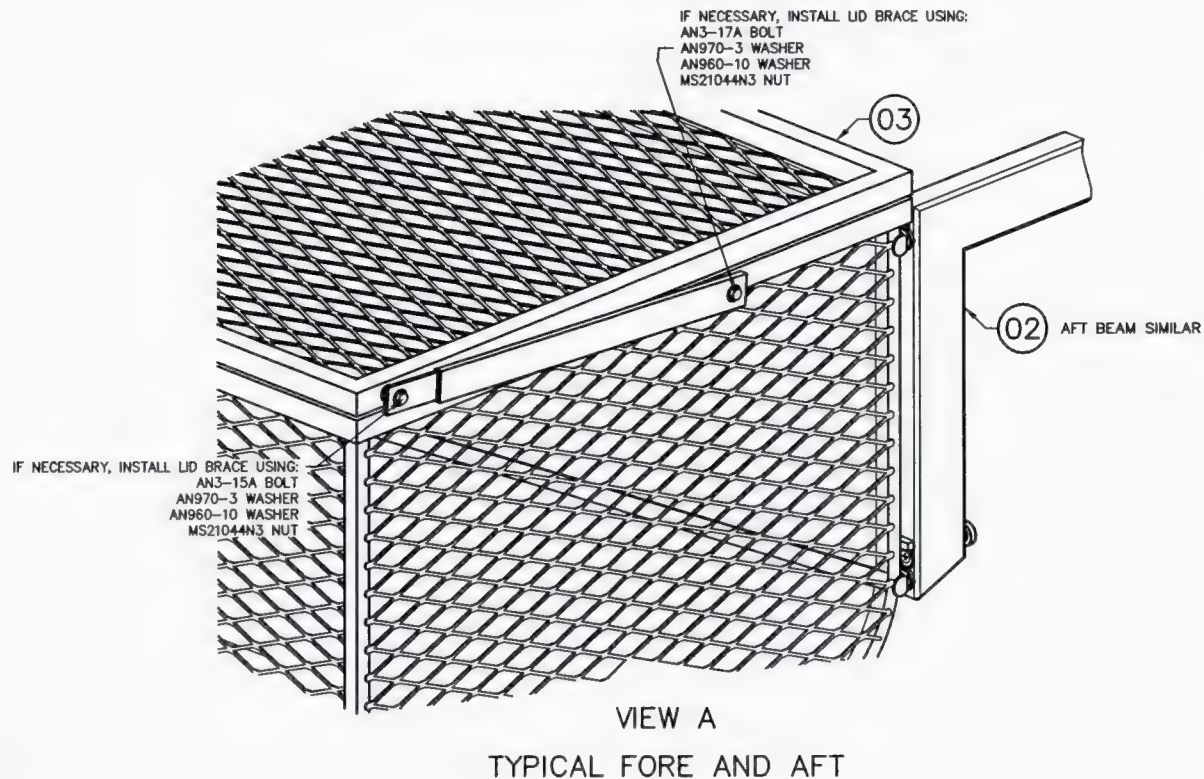
## WEIGHT AND BALANCE

ITEM	DESCRIPTION	WEIGHT (LB)	LONGITUDINAL		LATERAL	
			ARM (IN)	MOMENT (LB-IN)	ARM (IN)	MOMENT (LB-IN)
02	FORWARD BEAM	10.1	76.4	771.6	10.9	110.1
03	AFT BEAM	9.8	151.4	1483.7	12.6	123.5
01	MOUNTING PROVISIONS INSTALLATION	19.9	113.3	2255.3	11.7	233.6

NOTICE THIS DRAWING CONTAINS INFORMATION AND DATA WHICH IS PROPRIETARY TO AERO DESIGN LTD. THIS DRAWING, OR ANY PORTION THEREOF, MAY NOT BE REPRODUCED, COPIED, OR DUPLICATED IN ANY MANNER, NOR USED FOR MANUFACTURING WITHOUT THE WRITTEN CONSENT OF AERO DESIGN LTD. BY ACCEPTING THIS DRAWING FOR REFERENCE, THE RECIPIENT AGREES TO HOLD AERO DESIGN LTD. HARMLESS FROM THE USE, OR MISUSE, OF THIS DRAWING OR THE INFORMATION CONTAINED THEREON.	APPROVALS	DATE	<b>AERO DESIGN LTD.</b> CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M 2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7 tel: (403) 250-8027 fax: (403) 250-8333 aerodesign@telusplanet.net			
	DRAWN: JEFF CLARKE	15 JULY 2008				
	CHECKED: E. BURGOIN					
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON: DECIMALS                      ANGLES X.XXX ±0.010                      ±1/2" X.XX ±0.03 X.X ±0.1		BELL 206L SERIES QUICK RELEASE MOUNTING PROVISIONS PROVISIONS INSTALLATION			
	NOT TO SCALE	DWG. SIZE	DWG. NO.	REV.		
	SHEET 2 OF 2	A4	70202	0		



REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	CREATED FROM 49201	BJC	APR 17/06
1	UPPER BEAM ATTACHMENT CHANGED	BJC	NOV 09/06
2	ADD ELIGIBLE BEAM ASSEMBLIES	BJC	JUNE 29/07
3	DRAWING RESIZED, PROVISIONS MOVED TO DRAWING 70102	BJC	JULY 15/08



01 INSTALLATION

1	69810-01	03	CARGO BASKET ASSEMBLY
1	70102-01	02	PROVISIONS INSTALLATION
	70101-01	01	INSTALLATION
01	PART NO.	ITEM	DESCRIPTION
QTY.	LIST OF MATERIALS		

APPROVALS	DATE
DRAWN: JEFF CLARKE	17 APR 2006
CHECKED: E. BURGOIN	

**AERO DESIGN LTD.**  
CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M  
2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7  
tel: (403) 250-8027 fax: (403) 250-8333 aerodesign@telusplanet.net

--- NOTICE ---  
THIS DRAWING CONTAINS INFORMATION AND DATA WHICH IS PROPRIETARY TO AERO DESIGN LTD. THIS DRAWING, OR ANY PORTION THEREOF, MAY NOT BE REPRODUCED, COPIED, OR DUPLICATED IN ANY MANNER, NOR USED FOR MANUFACTURING WITHOUT THE WRITTEN CONSENT OF AERO DESIGN LTD. BY ACCEPTING THIS DRAWING FOR REFERENCE, THE RECIPIENT AGREES TO HOLD AERO DESIGN LTD. HARMLESS FROM THE USE, OR MISUSE, OF THIS DRAWING OR THE INFORMATION CONTAINED THEREON.

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES.  
TOLERANCES ON:  
DECIMALS ANGLES  
X.XXX  $\pm 0.010$   $\pm 1/2^\circ$   
X.XX  $\pm 0.03$   
X.X  $\pm 0.1$

BELL 407 QUICK RELEASE CARGO BASKET INSTALLATION				
NOT TO SCALE	DWG. SIZE	DWG. NO.	REV.	
SHEET 1 OF 2	A4	70101	3	

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	CREATED FROM 49201	BJC	APR 17/06
1	UPPER BEAM ATTACHMENT CHANGED	BJC	NOV 09/06
2	ADD ELIGIBLE BEAM ASSEMBLIES	BJC	JUNE 29/07
3	DRAWING RESIZED, PROVISIONS MOVED TO DRAWING 70102	BJC	JULY 15/08

NOTES:

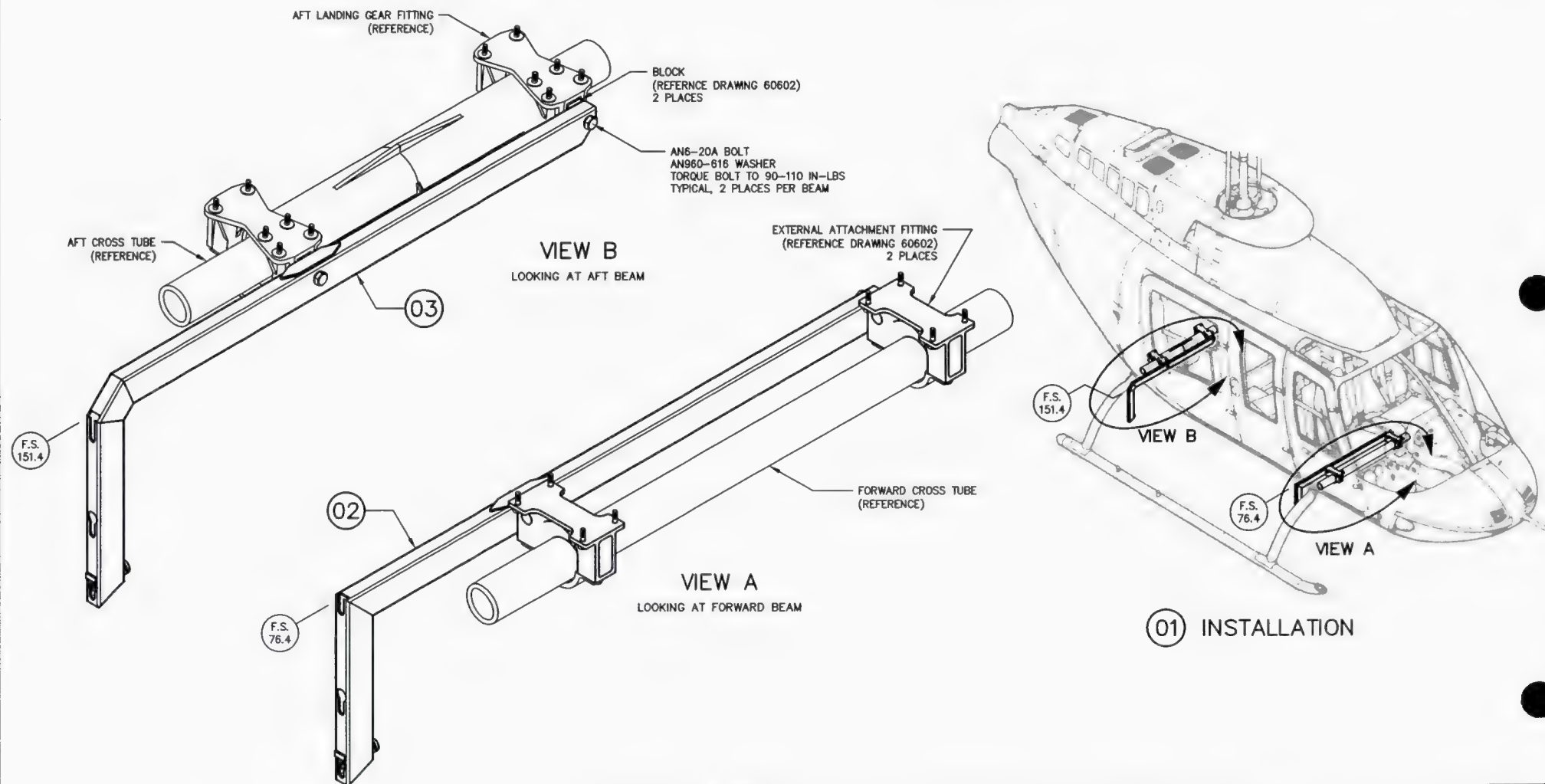
- EXTERNAL ATTACHMENT PROVISIONS INSTALLED IN ACCORDANCE WITH DRAWING 60602 IS MANDATORY PREREQUISITE FOR THIS INSTALLATION. QUICK RELEASE MOUNTING PROVISIONS INSTALLED IN ACCORDANCE WITH DRAWING 70102 IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
- HIGH SKID GEAR INSTALLATION IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
- SEE FLIGHT MANUAL SUPPLEMENT, FMS701.90, FOR LIMITATIONS ON HELICOPTER OPERATIONS WITH CARGO BASKET INSTALLED.
- SEE INSTRUCTIONS FOR CONTINUED AIRWORTHINESS, ICA698.90, FOR MAINTENANCE INFORMATION.
- BEAMS (73030-01 AND 73031-01) ARE USED FOR INSTALLATION OF EQUIPMENT ON BOTH LEFT AND RIGHT SIDES. PROVISIONS FOR INSTALLING THE QUICK RELEASE CARGO BASKET (69810-01) ON THE RIGHT SIDE IS PROVIDED.

## WEIGHT AND BALANCE

ITEM	DESCRIPTION	WEIGHT (LB)	LONGITUDINAL		LATERAL	
			ARM (IN)	MOMENT (LB-IN)	ARM (IN)	MOMENT (LB-IN)
01	CARGO BASKET INSTALLATION (CARGO BASKET AND MOUNTING PROVISIONS)	64.9	113.9	7390	30.3	1966
	CARGO	200 MAX	114.1	22820	38.5	7700

APPROVALS		DATE		<b>AERO DESIGN LTD.</b> CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M 2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7 tel: (403) 250-8027 fax: (403) 250-8333 aerodesign@telusplanet.net				
DRAWN: JEFF CLARKE		17 APR 2006						
CHECKED: E. BURGOIN								
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON: DECIMALS      ANGLES X.XXX ±0.010      ±1/2° X.XX ±0.03 X.X ±0.1				BELL 407 QUICK RELEASE CARGO BASKET INSTALLATION				
				NOT TO SCALE	DWG. SIZE	DWG. NO.	REV.	
				SHEET 2 OF 2	A4	70101	3	

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE	BJC	JULY 15/08



				APPROVALS		DATE		<div>AERO DESIGN LTD.</div> <div>CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M 2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7 tel: (403) 250-8027      fax: (403) 250-8333      aerodesign@telusplanet.net</div>			
4	AN960-616		WASHER	DRAWN: JEFF CLARKE		15 JULY 2008		<div>BELL 407</div> <div>QUICK RELEASE MOUNTING PROVISIONS</div> <div>PROVISIONS INSTALLATION</div>			
4	AN6-20A		BOLT	CHECKED: E. BURGOIN							
1	73031-02	03	AFT BEAM (ALTERNATE)	<div>UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON:</div> <div>DECIMALS                      ANGLES</div> <div>X.XXX ±0.010                      ±1/2°</div> <div>X.XX ±0.03</div> <div>X.X ±0.1</div>							
1	69831-02	03	AFT BEAM (ALTERNATE)								
1	69831-01	03	AFT BEAM								
1	73030-02	02	FORWARD BEAM (ALTERNATE)								
1	69830-02	02	FORWARD BEAM (ALTERNATE)								
1	69830-01	02	FORWARD BEAM				NOT TO SCALE		DWG. SIZE	DWG. NO.	REV.
	70102-01	01	INSTALLATION				SHEET 1 OF 2		A4	70102	0
01	PART NO.	ITEM	DESCRIPTION								
QTY.	LIST OF MATERIALS										



REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE	BJC	JULY 15/08

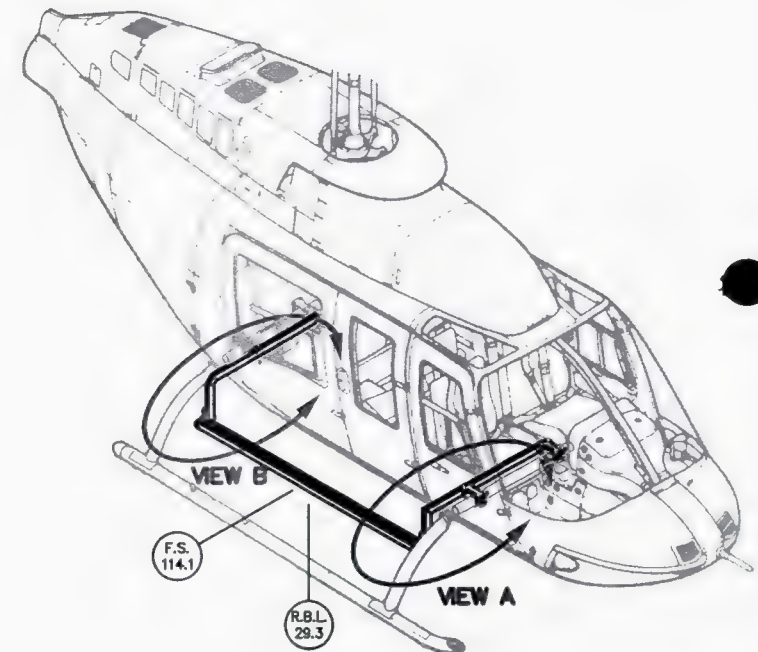
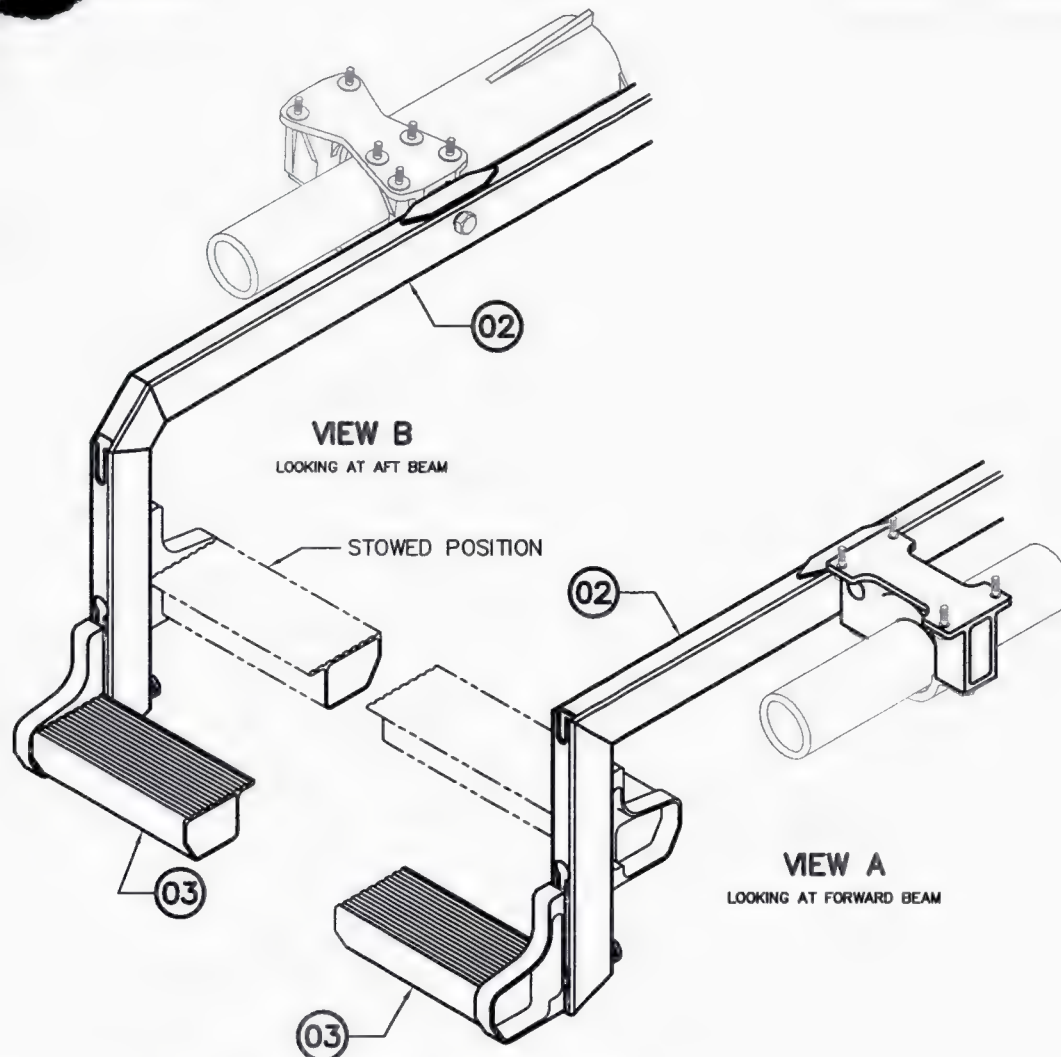
NOTES:

- EXTERNAL ATTACHMENT PROVISIONS INSTALLED IN ACCORDANCE WITH DRAWING 60602 IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
- HIGH SKID GEAR INSTALLATION IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
- BEAMS (73030-01 AND 73031-01) ARE USED FOR INSTALLATION OF EQUIPMENT ON BOTH LEFT AND RIGHT SIDES. PROVISIONS FOR INSTALLING THE QUICK RELEASE CARGO BASKET (69810-01) ON THE RIGHT SIDE IS PROVIDED.

## WEIGHT AND BALANCE

ITEM	DESCRIPTION	WEIGHT (LB)	LONGITUDINAL		LATERAL	
			ARM (IN)	MOMENT (LB-IN)	ARM (IN)	MOMENT (LB-IN)
02	FORWARD BEAM	10.1	76.4	771.6	10.9	110.1
03	AFT BEAM	9.8	151.4	1483.7	12.6	123.5
01	MOUNTING PROVISIONS INSTALLATION	19.9	113.3	2255.3	11.7	233.6

NOTICE THIS DRAWING CONTAINS INFORMATION AND DATA WHICH IS PROPRIETARY TO AERO DESIGN LTD. THIS DRAWING, OR ANY PORTION THEREOF, MAY NOT BE REPRODUCED, COPIED, OR DUPLICATED IN ANY MANNER, NOR USED FOR MANUFACTURING WITHOUT THE WRITTEN CONSENT OF AERO DESIGN LTD. BY ACCEPTING THIS DRAWING FOR REFERENCE, THE RECIPIENT AGREES TO HOLD AERO DESIGN LTD. HARMLESS FROM THE USE, OR MISUSE, OF THIS DRAWING OR THE INFORMATION CONTAINED THEREON.	APPROVALS	DATE	<b>AERO DESIGN LTD.</b> CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M 2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7 tel: (403) 250-8027 fax: (403) 250-8333 aerodesign@telusplanet.net				
	DRAWN: JEFF CLARKE CHECKED: E. BURGAIN	15 JULY 2008					
	UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON: DECIMALS                      ANGLES X.XXX ±0.010                      ±1/2" X.XX ±0.03 X.X ±0.1		BELL 407 QUICK RELEASE MOUNTING PROVISIONS PROVISIONS INSTALLATION				
			NOT TO SCALE	DWG. SIZE	DWG. NO.	REV.	
			SHEET 2 OF 2	A4	70102	0	



1	80010-7475	03	STEP ASS'Y (74.75 LONG)
1	70202-01	02	PROVISIONS INST'N (206L)
1	70102-01	02	PROVISIONS INST'N (407)
	80002-01	01	INSTALLATION
QTY.	PART NO.	ITEM	DESCRIPTION

#### LIST OF MATERIALS

--- NOTICE ---  
THIS DRAWING CONTAINS INFORMATION AND DATA WHICH IS PROPRIETARY TO AERO DESIGN LTD. THIS DRAWING, OR ANY PORTION THEREOF, MAY NOT BE REPRODUCED, COPIED, OR DUPLICATED IN ANY MANNER, NOR USED FOR MANUFACTURING WITHOUT THE WRITTEN CONSENT OF AERO DESIGN LTD. BY ACCEPTING THIS DRAWING FOR REFERENCE, THE RECIPIENT AGREES TO HOLD AERO DESIGN LTD. HARMLESS FROM THE USE, OR MISUSE, OF THIS DRAWING OR THE INFORMATION CONTAINED THEREON.

APPROVALS	DATE
DRAWN: JEFF CLARKE	15 JULY 2008
CHECKED: E. BURGAIN	

UNLESS OTHERWISE SPECIFIED  
DIMENSIONS ARE IN INCHES.  
TOLERANCES ON:  
DECIMALS ANGLES  
X.XXX  $\pm 0.010$   $\pm 1/2^\circ$   
X.XX  $\pm 0.03$   
X.X  $\pm 0.1$

**AERO DESIGN LTD.**  
CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M  
2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7  
tel: (403) 250-8027 fax: (403) 250-8333 aerodesign@telusplanet.net

#### BELL 206L SERIES & 407 QUICK RELEASE STEP STEP INSTALLATION

NOT TO SCALE	DWG. SIZE	DWG. NO.	REV.
SHEET 1 OF 2	A4	80002	0

REV.	DESCRIPTION OF CHANGE	INITIALS	DATE
0	INITIAL ISSUE	BJC	JULY 15/08

NOTES:

1. QUICK RELEASE MOUNTING PROVISIONS INSTALLED IN ACCORDANCE WITH DRAWING 70102 (BELL 407) OR 70202 (BELL 206L SERIES) IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
2. HIGH SKID GEAR INSTALLATION IS MANDATORY PREREQUISITE FOR THIS INSTALLATION.
3. REFER TO FLIGHT MANUAL SUPPLEMENT FMS701.90 (BELL 407) OR FMS702.90 (BELL 206L SERIES) FOR LIMITATIONS WITH THE QUICK RELEASE STEP INSTALLED.
4. REFER TO INSTRUCTIONS FOR CONTINUED AIRWORTHINESS ICA800.90 FOR MAINTENANCE INFORMATION.

## WEIGHT AND BALANCE

ITEM	DESCRIPTION	WEIGHT (LB)	LONGITUDINAL		LATERAL	
			ARM (IN)	MOMENT (LB-IN)	ARM (IN)	MOMENT (LB-IN)
02	MOUNTING PROVISIONS INSTALLATION	19.9	113.3	2255.3	11.7	233.6
03	STEP ASSEMBLY	8.2	114.1	935.6	29.3	239.9
01	STEP INSTALLATION	28.1	113.6	3190.9	16.9	473.5
02	MOUNTING PROVISIONS INSTALLATION	19.9	113.3	2255.3	11.7	233.6
03	STEP ASSEMBLY (STOWED)	8.2	114.1	935.6	23.7	194.3
01	STEP INSTALLATION (STOWED)	28.1	113.6	3190.9	15.2	427.9

APPROVALS		DATE		<b>AERO DESIGN LTD.</b> CONSULTING ENGINEERS, TRANSPORT CANADA APPROVALS, DAR 290M 2013 - 39TH AVENUE N.E., CALGARY, ALBERTA, CANADA, T2E 6R7 tel: (403) 250-8027 fax: (403) 250-8333 aerodesign@telusplanet.net			
DRAWN: JEFF CLARKE		15 JULY 2008					
CHECKED: E. BURGAIN							
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES. TOLERANCES ON: DECIMALS                      ANGLES X.XXX ±0.010                      ±1/2" X.XX ±0.03 X.X ±0.1				BELL 206L SERIES & 407 QUICK RELEASE STEP STEP INSTALLATION			
NOT TO SCALE		DWG. SIZE	DWG. NO.	REV.			
SHEET 2 OF 2		A4	80002	0			

**AERO DESIGN LTD.**

2013 – 39 Avenue N.E., Calgary, Alberta, T2E 6R7

Tel: 403-250-8027

Fax: 403-250-8333

www.aerodesign.ca

03 December, 2008

Transport Canada  
Aircraft Certification Division  
11<sup>th</sup> Floor, Canada Place  
9700 Jasper Avenue  
Edmonton, Alberta  
T5J 4E6

**FAXED**  
6:08  
2:13

Attn: Jack Staal

Your File : C-08-1002

Our File : 800-2

Re: Bell 206L/407 Quick Release Step

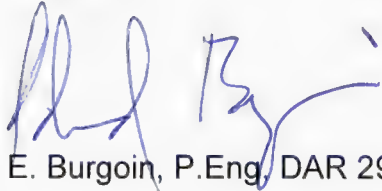
Jack,

Please find attached the following documents related to this project:

Modification Approval Request Application Form	MOD800-2	Rev. 0
Compliance Program	CP800-2	Rev. 0
Project Summary	PS800-2	Rev. 0

Please extend my delegation to include the paragraphs noted on the attached compliance program.

Regards,



E. Burgoin, P.Eng, DAR 290M

Encl.



# AIRWORTHINESS REQUIREMENTS COMPLIANCE PROGRAM

APPLICANT: AERO Design Ltd.  
2013 39<sup>th</sup> Avenue NE  
Calgary, Alberta, T2E 6R7

DATE: 2 December, 2008  
REV. No. 0

CORRESPONDANCE TO:  
(If other than applicant)

MAKE: Bell  
MODEL: 206L Series, 407

REGISTRATION: All Applicable  
SERIAL No.: All Applicable

NATURE OF WORK: Installation of Quick Release Step onto existing Quick Release Mounting Provisions

MODEL CERTIFICATION BASIS: FAR 27, Amendment 27-30, with exceptions as noted below. (Bell 407, highest of 206L Series and 407)

MODIFICATION CERTIFICATION BASIS: FAR 27, Amendment 27-30, with exceptions as noted below.

Airworthiness Requirement	Subject for Compliance or Documentary Proof		Form of Substantiation	DOT	DAR	Comments
Paragraph	Amdt.					
Subpart B – Flight						
27.29	30	Empty Weight and Corresponding C of G	Data specified on inst'n drawing		X	
27.251	30	Vibration	Statement in Report		**	
Subpart C – Strength Requirements						
27.301	30	Loads – Air Drag/Lift Loads	Analysis		X	
27.301	30	Loads – Inertia Loads	Compliance with 27.337 and 27.561		X	
27.303	30	Factor of Safety	Analysis		X	
27.305	30	Strength and Deformation	Analysis and Test iaw AC 43.13-1B		X	
27.307	30	Proof of Structure	Analysis and Test iaw AC 43.13-1B		X	
27.337(a)	30	Limit Maneuvering Load Factor – Positive	Analysis and Test iaw AC 43.13-1B		X	Critical load factor in downward direction.
27.561	24	Emergency Landing Conditions	N/A		X	Step is located below cabin, not above or behind occupants.
Subpart D – Design and Construction						
27.601	30	Design	Drawings		X	Design is conventional.
27.603	30	Materials	Drawings		X	Materials used are specified in Mil-Hdbk-5J.
27.605	30	Fabrication Methods	Drawings		X	Design is conventional.
27.609	30	Protection of Structure	Drawings		X	
27.611	30	Inspection Provisions	Drawings		X	Design is easy to inspect.

Airworthiness Requirement	Subject for Compliance or Documentary Proof	Form of Substantiation	DOT	DAR	Comments
Paragraph	Amdt.				
27.613	30	Material Strength Properties and Design Values		X	
27.625	30	Fitting Factor		X	
27.629	30	Flutter		**	
27.783	30	Doors			Installation does not block doors.
27.807	30	Emergency Exits		X	Installation does not block doors.
27.1387	30	Position Light System Dihedral Angles			No change from Type Approval.
27.1401	30	Anticollision Light System			No change from Type Approval.
<b>Subpart G – Operating Limitations and Information</b>					
27.1505	30	Never Exceed Speed			No change from Type Approval.
27.1529	30	Maintenance Manual		X	
27.1581	30	Rotorcraft Flight Manual – General		X	Existing FMS for basket updated.
<b>Airworthiness Manual Requirements</b>					
527.1581(e)		Rotorcraft Flight Manual – Units		X	

Items marked \*\* indicate chapters where extension of delegation is requested.

**Title:** Quick Release Step Installation  
**Approval:** STC  
**Manufacture:** Mfd by Aero Design (amend Approved Product List)  
**Customer:** AERO Design Ltd.  
**Type and Model:** Bell 206L Series & 407

**Definition Of Change:**

**Description:**

Installation of a Quick Release Step using the Mounting Provisions supplied for use with the Quick Release Cargo Basket. The step is an aluminum extrusion, with aluminum brackets welded to the end. The step locks into the same mechanism as the basket.

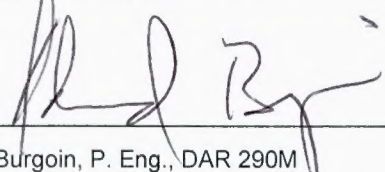
**Primary Changes to the Aeronautical Product:**

Installation of quick release step.

**Secondary Changes to the Aeronautical Product (Required as consequence of primary changes):**

**Other Relevant Modifications to the Aeronautical Product (Which impact on this change):**

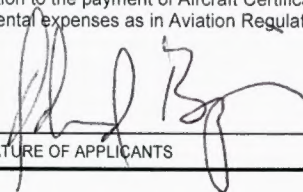


CHANGED PRODUCT RULE (CPR) DECISION RECORD	
<b>NAPA No.:</b>	
<b>Step 1:</b> Identify the proposed change to the aeronautical product. (Section 4.1 of AC 500-016)	The changes are as previously described.
<b>Step 2:</b> Is the change substantial? (Section 4.2 of AC 500-016)	<input type="checkbox"/> Yes A new type certificate is required. CPR Decision Process is <b>Closed</b> . <input checked="" type="checkbox"/> No Proceed to Step 3
<b>Step 3:</b> Will the latest standards be used? (Section 4.3 of AC 500-016)	<input type="checkbox"/> Yes Certification basis to use latest standards. CPR Decision Process is <b>Closed</b> . <input checked="" type="checkbox"/> No Proceed to Step 4.
<b>Step 4:</b> Is the proposed change significant? (Section 4.4 of AC 500-016)	<input type="checkbox"/> Yes Proceed to Decision. <input checked="" type="checkbox"/> No Compliance may be shown to earlier standards. Certification basis to be defined and documented as indicated (below). CPR Decision Process is <b>Closed</b> .
<b>Decision:</b> Will the latest standards be used?	<input type="checkbox"/> Yes Certification basis to use latest standards. CPR Decision Process is <b>Closed</b> . <input checked="" type="checkbox"/> No Proceed to Step 5, addressing each area separately (see below).
<b>Identification of Affected Areas:</b>	The area(s) affected by the proposed change have been detailed in Compliance Program: CP800-2
<b>Note:</b> A delegate may develop a proposal for the Yes/No decision of Step 6, however, TCCA will make the final determination.	
<b>Area:</b>	
<b>Step 5:</b> Is this area affected by the proposed change? (Section 6.1 of AC 500-016)	<input type="checkbox"/> Yes Proceed to Step 6. <input checked="" type="checkbox"/> No Compliance with the latest standards is not required. Compliance may be shown to earlier standards. Certification basis defined or documented as indicated below.
<b>Step 6:</b> Are the latest standards practical and do they contribute materially to the level of safety? (Section 6.2 of AC 500-016)	<input type="checkbox"/> Yes Certification basis to be established using latest standards. <input checked="" type="checkbox"/> No Compliance with the latest standards is not required. Compliance may be shown to earlier standards. Certification Basis defined or documented as indicated in below.
<input type="checkbox"/> Continuation Sheet(s) Attached	<b>Note:</b> Several standards may apply to each area and the assessment may differ from standard to standard. Indicate Yes if compliance with any latest standard(s) will be required. Indicate No only if no later standards are to be applied.
<b>Certification Basis</b>	The certification basis is as follows or as detailed in the listed document(s): Bell 407, TCDS H-92: FAR part 27, dated October 2, 1964 Amendment 27-1 through 27-30; Paragraph 27.561(b)(3) at Amdt 27-24; Section 27.563 at Amdt. 27-25; Section 27.785 at Amdt 27-24; Section 27.1093 at amendment 27-8; and Section 27.173 and 27.175 at amendment 27-1. Exemptions to FAR 27 are the deletion of sections: 27.562, 27.1195, and 27.952(b)(1)
Under the delegated authority, I have examined the change in type design listed above according to established procedures and hereby determine, to the best of my knowledge and belief, that it is. (check one)	
<input type="checkbox"/> substantial, pursuant to subsection 511.14 or 513.14 of the CARs <input type="checkbox"/> significant, pursuant to subsection 511.13(3) or 513.07(3) of the CARs <input checked="" type="checkbox"/> not significant, pursuant to subsection 511.13(3) or 513.07(3) of the CARs	
<div style="display: flex; justify-content: space-between;"> <div>             E. Burgoin, P. Eng., DAR 290M         </div> <div>           2 December, 2008            Date         </div> </div>	



MODIFICATION APPROVAL REQUEST APPLICATION FORM

MOD800-2, Rev. 0

1. NAME AND ADDRESS OF APPLICANT:		2. IDENTIFICATION OF PRODUCT				
AERO Design Ltd. 2013 - 39th Avenue NE Calgary, Alberta T2E 6R7		MAKE:  Bell		MODEL:  206L Series, 407		
ALL CORRESPONDANCE TO: AERO Design Ltd. 2013 - 39th Avenue NE Calgary, Alberta T2E 6R7		SERIAL No.:  All Eligible		REGISTRATION:  All Eligible		
3. REQUEST FOR:						
A. SUPPLEMENTAL TYPE CERTIFICATE (STC)		<input type="checkbox"/>				
B. STC/STA REVISION		<input checked="" type="checkbox"/> STC/STA No. SH00-48				
C. LIMITED SUPPLEMENTAL TYPE CERTIFICATE (LSTC)		<input type="checkbox"/>				
D. LIMITED STC/STA REVISION		<input type="checkbox"/> LSTC/LSTA No.				
E. F.A.A. SUPPLEMENTAL TYPE CERTIFICATE		<input type="checkbox"/>				
F. F.A.A. STC REVISION		<input type="checkbox"/> STC No.				
G. FAMILIARIZATION OF F.A.A. STC		<input type="checkbox"/> STC No.				
H. REPAIR DESIGN APPROVAL (RDC)		<input type="checkbox"/>				
I. PARTS DESIGN APPROVAL (PDA)		<input type="checkbox"/>				
4. TITLE OF MODIFICATION OR REPAIR: Quick Release Mounting Provisions Installation; Quick Release Basket Installation; Quick Release Step Installation						
5. BRIEF DESCRIPTION OF MODIFICATION OR REPAIR: Installation of external quick release mounting provisions, and installation of a cargo basket on those provisions. This revision adds a step that may be installed on the quick release provisions when the basket is removed.						
6. APPLICABLE TYPE APPROVAL (TA) OR TYPE CERTIFICATE (TC) DOCUMENTS:						
A. TA NO. <u>H-92</u> B. TC No. _____      C. OTHER _____						
7. PROPOSED BASIS OF APPROVAL:						
A. SAME AS TA <input checked="" type="checkbox"/> B. SAME AS TC <input type="checkbox"/> C. OTHER <input type="checkbox"/> (Please specify) _____						
8. DOCUMENTATION CHECKLIST		REQUIRED		FOR DOT USE ONLY		
		YES	NO	RECEIVED		
		YES	NO	YES	NO	DATE
COMPLIANCE PROGRAM		X				
MASTER DRAWING LIST		X				
FLIGHT MANUAL SUPPLEMENT		X				
MAINTENANCE MANUAL SUPPLEMENT			X			
INSTRUCTIONS FOR CONTINUING AIRWORTHINESS		X				
ENGINEERING REPORTS		X				
DESIGN DRAWINGS			X			
MANUFACTURE DRAWINGS & INSTALLATION INSTRUCTIONS		X				
ELECTRICAL LOAD ANALYSIS			X			
DRAFT STC, LSTC OR RDA			X			
WEIGHT AND MOMENT CHANGE		X				
FLIGHT TEST DATA			X			
OTHER (Specify)						
9. APPLICANT'S REMARKS:						
10. In addition to the payment of Aircraft Certification approval fees as prescribed in Canadian Aviation Regulations (CAR) Section 104, I agree to reimburse Transport Canada incremental expenses as in Aviation Regulation Directive No. 3, or equivalent, as applicable. For further details governing cost recovery, refer to AMA 513/4.						
PER: 		Consultant		2 December, 2008		
SIGNATURE OF APPLICANTS		TITLE		DATE		
11.						
SIGNATURE OF REGIONAL ENGINEER		DATE				